UNIVERSITY OF PENNSYLVANIA

A STUDY OF THE ADEQUACY AND EFFECTIVENESS OF THE PENNSYLVANIA SCHOOL EMPLOYES' RETIREMENT SYSTEM

REUBEN T. SHAW

A THESIS

IN EDUCATIONAL ADMINISTRATION

PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

PHILADELPHIA
1926

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TABLE OF CONTENTS

PAGE

List of Tables vii
List of Diagrams xi
Acknowledgment xiii

INTRODUCTION 1
1. Purpose and Scope
2. Sources
   A. Original
   B. Secondary
3. Procedure
   A. Questionnaire to all Pennsylvania Retired School Employes
   B. Comparison with Other States
   C. Validity of data
4. Background
   A. The Pension Movement in the United States
   B. The Retirement System in Pennsylvania
   C. The Pennsylvania Law of 1917
   D. Membership in the Pennsylvania System
   E. The Purpose of a Retirement System
   F. Organization of Material

PART I. REGULATIONS AND BASIS OF SUPERANNUATION RETIREMENT IN PENNSYLVANIA AND THE CORRESPONDING PRACTICE IN OTHER STATES 19
1. Introductory
2. The Half-pay Idea
3. The Pennsylvania Superannuation Benefit

CHAPTER I. AGE 23
1. Provisions and Practices in the Nine States
2. Provision, Regulation and Practice in Pennsylvania
   A. Present Age of Retired Employes
   B. Age at Retirement
   C. Compulsory Retirement Age
   D. Effect of Retirement Allowance Upon the Time of Retirement
3. Summary

CHAPTER II. SERVICE 33
1. Regulations of the Nine States in Regard to Service
   A. Length of Service
   B. Continuity of Service
   C. Minimum Amount of Service Required

PAGE

D. Number of Years of Service Regarded as the Proper Amount to Produce a Retirement Allowance Equal to One-half of Salary
2. The Pennsylvania System in Regard to Service
A. Service in the Public Schools of Pennsylvania
B. Outside Service
C. Continuity of Service
D. Credit Beyond the Age of 62
3. Summary

CHAPTER III. SALARY 52
1. Methods of Relating Allowance to Salary
2. Methods Used by the Pennsylvania System
3. Salaries in Pennsylvania
4. Average Salary During Latter Part of Service
5. Maximum Salary Restriction
6. Expert Opinion
7. Provision of the Nine States in Regard to Salary
8. Summary

CHAPTER IV. COSTS AND BENEFITS 66
1. Costs
A. Contributory vs. Non-contributory System
B. Cash Disbursement Plan vs. Reserve Plan
C. The Pennsylvania System—A Reserve Plan
D. What Constitutes an Adequate Reserve?
E. Provisions of the Nine States
2. Benefits
A. Superannuation Benefit
B. Disability Benefit
C. Death Benefit
D. Withdrawal Benefit
E. Prior Service Benefit
F. Provision of the Nine States
G. Illustration of the Wisconsin Law
3. Summary

Summary Part I 79

PART II. SOCIAL AND ECONOMIC STATUS OF RETIRED SCHOOL EMPLOYES IN PENNSYLVANIA 81

CHAPTER V. EDUCATION AND TRAINING 81
1. Amount of Training Beyond the Eighth Grade
2. Teaching Certification and Academic Degrees

PAGE

3. Some Comparisons Between Retired Teachers and Teachers now in Positions
4. Summary

CHAPTER VI. RETIREMENT ALLOWANCE..... 86

1. Amount
2. The Pennsylvania System
3. Provision of the Nine States
4. Summary

CHAPTER VII. INCOME OTHER THAN RETIREMENT ALLOWANCE.... 95

1. Annual Income from Personal Savings
2. Annual Income from Inheritance
3. Income from Position Taken Since Retirement
4. Explanation Given for Small Personal Savings
5. Arrangement for Meeting the Present Cost of Living
6. Amounts Indicated as Necessary to Meet Minimum Needs

CHAPTER VIII. DEPENDENTS AND PRESENT OCCUPATION OF RETIRED EMPLOYES..... 108

1. Marital Condition
2. Number of Children
3. Education of Children
4. Number of Children Now Dependent
5. Dependents and Amount of Retirement Allowance
6. Present Occupations
7. Summary

CHAPTER IX. AMENDMENTS..... 114

1. Attitude of Retired Employes Toward Amendments Proposed by the Pennsylvania State Education Association
2. Other Amendments Suggested by the Retired Employes
3. Summary

Summary Part II..... 119

Summary..... 120

APPENDIX I. The Pennsylvania Law with the 1925 Amendments Annotated..... 123

PAGE

APPENDIX II. The Amendments of 1925 and their Effect upon Retirement Allowances..... 142

APPENDIX III. The Pennsylvania Plan—Comments of the Carnegie Foundation..... 148

APPENDIX IV. The Massachusetts Plan—Comments of the Carnegie Foundation..... 150

APPENDIX V. Selected Bibliography..... 152

LIST OF TABLES

PAGE

TABLE 1.—Distribution of Retired Employes According to Age as Shown by the Actuary's List as of June 30, 1924 (Column A) and Replies to the Questionnaire (Column B) 6

TABLE 2.—Distribution of Retired Employes According to Position Held at the Time of Retirement 7

TABLE 3.—Number and Percentage Distribution of Retired Employes According to Sex as Shown by the Records Indicated 9

TABLE 4.—Number and Distribution of the Membership of the Pennsylvania Retirement System According to the Official Records of the Retirement Board as of June 30 Each Year from 1919-1925 (inclusive) 14

TABLE 5.—Number and Average Retirement Allowance of Superannuation Annuitants According to the Official Records of the Retirement Board as of June 30 Each Year from 1919-1925 (inclusive) 15

TABLE 6.—Comparison of the Regulations of the Nine States in Regard to Age 24

TABLE 7.—Distribution of Replies to the Questionnaire According to Age Attained January 1, 1925 25

TABLE 8.—Distribution of Replies to Questionnaire According to Age at Time of Retirement 26

TABLE 9.—Distribution of Replies According to the Opinions of the Retired Employes as to Whether They Would Have Applied for Retirement Earlier if Retirement Allowance Had Been Greater 29

TABLE 10.—Distribution of the Replies According to the Amounts Indicated in Answer to the Question "How Much Greater?". 29

TABLE 11.—Distribution of Replies According to the Desire to Continue After the Age of 70 if Permitted 30

TABLE 12.—Comparison of the Regulation of the Nine States in Regard to Service 34

TABLE 13.—Distribution of Replies on the Basis of Years of Service in the Public Schools of Pennsylvania 39

TABLE 14.—Distribution of Replies on the Basis of Years of Service in Other Educational Institutions in Pennsylvania Not Part of Public School System 41

TABLE 15.—Distribution of Replies on the Basis of Years of Service in Public Schools Outside of Pennsylvania 42

TABLE 16.—Distribution of Replies on the Basis of Years of Service in Other Educational Institutions Outside of Pennsylvania (not part of public school system) 43

TABLE 17—Combination of Tables 13, 14, 15, 16 to Show Proportionate parts of the Grand Total of All School Service Rendered by the 509 Replies to the Questionnaire 44

PAGE

TABLE 18.—Distribution of Replies on the Basis of Continuity of Service in the Pennsylvania Public School System..... 47
TABLE 19.—Distribution of Replies on the Basis of Length of the Break in the Continuity of Pennsylvania Public School Service.. 48
TABLE 20.—Distribution of Replies on the Basis of Years of Service Accredited in Determining State Annuity..... 49
TABLE 21.—Distribution of Replies on the Basis of Position at the Time of Retirement..... 50
TABLE 22.—Distribution of Replies on the Basis of Salary Per Month the First Year of Service in the Pennsylvania Public Schools.. 55
TABLE 23.—Distribution of Replies on the Basis of Months in First Year of Service in Pennsylvania..... 55
TABLE 24.—Distribution of Replies on the Basis of Salary Per Month the Last Year of Service Preceding Retirement..... 56
TABLE 25.—Distribution of Replies on the Basis of Months in Last Year of Service in Pennsylvania..... 57
TABLE 26.—Average Salary for the Last Five Years Preceding Retirement 58
TABLE 27.—Distribution of Replies on the Basis of Average Annual Salaries for the Last Ten Years of Service..... 60
TABLE 28.—Relation of Average Salary the Last Ten Years of Service to Retirement Allowance..... 61
TABLE 29.—Comparison of the Regulations of the Nine States in Regard to Salary..... 64
TABLE 30.—Comparison of the Provisions of the Nine States in Regard to Costs..... 74
TABLE 31.—Comparison of the Kind of Benefits Provided by the Nine States..... 75
TABLE 32.—Education of Retired Employes—Years of Training Beyond Eighth Grade..... 81
TABLE 33.—Education of Retired Employes—Academic Degrees..... 82
TABLE 34.—Education of Retired Employes—State Certificates..... 83
TABLE 35.—Distribution of Retired Employes According to Sex, Position and Annual Retirement Allowance as Shown by the Replies to the Questionnaire..... 87
TABLE 36a. Number and Distribution of Those Who Indicated in the Questionnaire That They Had Selected One of the Options Offered at Retirement..... 88
TABLE 36b.—Options Selected by Retired Employes..... 88
TABLE 37.—Annual Retirement Allowance of Retired Employes as Shown by the Records of the Retirement Board June 1925, Prior to the Effect of the 1925 Amendments..... 91
TABLE 38.—Annual Retirement Allowance of Retired Employes as Shown by the Records of the Retirement Board July 1925, After the Effect of the 1925 Amendments..... 92

PAGE

TABLE 39.—Comparison of the Provisions of the Nine States in Regard to Retirement Allowance—Superannuation 93

TABLE 40.—Distribution of Retired Employes According to Sex, Position and Total Income from Personal Savings, as Shown by the Replies to the Questionnaire 96

TABLE 41.—Relation of Average Salary for the Last Ten Years to Income from Personal Savings 98

TABLE 42.—Distribution of Retired Employes According to Sex, Position and Total Income from Inheritance, as Shown by the Replies to the Questionnaire 98

TABLE 43.—Distribution of Retired Employes According to Sex, Position and Total Income from Position Taken Since Retirement, as Shown by the Replies to the Questionnaire 99

TABLE 44.—Distribution of Retired Employes According to Sex, Position and Total Income, Not Including Retirement Allowance, as Shown by the Replies to the Questionnaire 100

TABLE 45.—Relation of Average Salary for the Last Ten Years to Total Income Other Than Retirement Allowance 101

TABLE 46.—Distribution of Replies on the Basis of the Explanation Given for the Fact That the Accumulation of Personal Savings was so Small 102

TABLE 47.—Present Living Conditions—Distribution of Replies to the Following Questions 103

1. Do you live with relatives or friends?
2. If so, do you pay board?
3. Do you pay for room?
4. Do you receive a cash allowance from them?
5. Do you receive any sort of aid from any source that is not included in the above?

TABLE 48.—Amounts Indicated by the Replies to the Questionnaire as Necessary to Meet Present Minimum Needs 104

TABLE 49.—Relation of the Retirement Allowance to the Amount Indicated as necessary to Satisfy Minimum Needs 105

TABLE 50.—Relation of Average Salary for the Last Ten Years to Amount Indicated as Necessary to Satisfy Minimum Needs 106

TABLE 51.—Marital Condition—Distribution of Replies to the Questions Indicated 108

1. Were you married?
2. Is your husband or wife living?
3. How many children have you?

TABLE 52.—Distribution of Living Wives or Husbands of Retired Employes According to Age 109

PAGE

TABLE 53.—Distribution of Retired Employes According to the Number of Children Still Dependent Upon Them for Support January, 1925 111

TABLE 54.—Distribution of Replies According to the Number of Employes' Children Who Had Received An Education Beyond the Eighth Grade 110

TABLE 55.—Distribution of Retired Employes According to New Position Taken Since Retirement 112

TABLE 56.—Preferences in Regard to Proposed Amendments as Indicated by Replies to the Questionnaire 113

TABLE 57.—Number and Distribution of Those on the Retired List Who Were Benefited by the 1925 Amendments According to the Official Records of the Retirement Board 116

LIST OF DIAGRAMS

PAGE

DIAGRAM 1.—Age Distribution on January 1, 1925 as Shown by Replies to the Questionnaire, Compared with Age Distribution on June 30, 1924 as Shown by the Report of the Actuary 8

DIAGRAM 2.—Number Retiring at Each Age, as Shown by the Replies to the Questionnaire 28

DIAGRAM 3.—Percentage Distribution of Retired Employes on the Basis of Length of Service in the Public Schools of Pennsylvania, as Shown by the Replies to the Questionnaire 40

DIAGRAM 4.—Percentage Distribution of Retired Employes on the Basis of Average Salary for the Last Ten Years Preceding Retirement, as Shown by the Replies to the Questionnaire 59

DIAGRAM 5.—Accumulations in the Various Reserve Funds of the Pennsylvania School Employes' Retirement System 69

DIAGRAM 6.—a. Contribution of $60.00 Per Year for 40 Years Together with Accumulations

b. Fund to Produce a $500.00 Annuity 73

DIAGRAM 7.—Percentage Distribution of Retired Employes on the Basis of Retirement Allowance, as Shown by the Replies to the Questionnaire 90

DIAGRAM 8.—Percentage Distribution of Retired Employes on the Basis of Total Income from Personal Savings, as Shown by Replies to the Questionnaire 97

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INTRODUCTION

PURPOSE AND SCOPE

The purpose of this study is to determine the effectiveness and adequacy of the Pennsylvania School Employes' Retirement System. The study confines itself chiefly to the economic conditions of the employes retired on account of superannuation, and certain other factors which bear upon these economic conditions and effectiveness of the system. It aims

1. To gather together data concerning the actual operation of the retirement system in Pennsylvania, the economic status of the retired employes, and the opinion of the retired employes as to the provisions of the retirement law.
2. To evaluate the provisions of the Pennsylvania Plan in the light of the opinions of the retired employes, the practice in other states and authoritative opinions in this field.

SOURCES

The original sources from which the data were secured consisted of the replies to a questionnaire sent to the retired employes and the official records of the Pennsylvania Retirement Board.

The secondary sources from which data were secured for this study include the following:

1. Reports of the Retirement Board of Pennsylvania.
2. Reports of the Retirement Boards of other states.
3. Reports of the Carnegie Foundation for the Advancement of Teaching.
4. Reports of Pension Commissions of Massachusetts, of New York City and of Illinois.
5. Publications[1] of the Institute for Government Research.
6. Reports of the National Education Association Committee on Retirement Allowance.
7. Reports of the U. S. Bureau of Education.
8. Parliamentary documents of Great Britain.

---

[1]Meriam, Lewis, Principles Governing Retirement of Public Employes. D. Appleton and Company. 1918.

[1]Studensky, P., Teachers' Pension Systems in the United States. D. Appleton and Company. 1920.

PROCEDURE

The difficulty of securing accurate data concerning the economic conditions of any group of people was fully recognized. Much of the data desired was of such a personal nature, and the retired employes were so widely scattered that the only practical procedure by which it could be secured seemed to be through the use of a questionnaire. Precaution was taken in the preparation of the questionnaire to make certain that each question was as definite and simple as possible. Before it was printed for general distribution, it was sent in mimeograph form to about twenty-five retired employes of all types. The results of this trial distribution contributed greatly toward the final form of the questionnaire. In order that there should be no hesitancy to give definite and complete answers in regard to personal facts, the retired employes were specifically asked not to give their names.

The questionnaire is herewith printed in the form in which it was sent out to the 850 retired employes on the list of those retired on account of superannuation in January, 1925. Of these, 509, or 60 per cent, were answered and returned.

3440 WALNUT STREET
Philadelphia, Pennsylvania

January, 1925.

To all persons on the Retired List of
Pennsylvania School Employees:

The Pennsylvania retirement system has now been in operation five years. This questionnaire is sent to you in order to secure certain information that will assist in determining the effectiveness and adequacy of this retirement system. No doubt you are aware that the Pennsylvania State Education Association has endorsed certain amendments.

A detailed study of conditions may show that some of the proposed amendments are unwise or that there are other amendments equally advisable or even more advisable. Some may think that the questions are almost too personal, but in order that you may feel entirely free to give exact and complete answers, it has been decided not to ask for your signature.

It is hoped that you will answer all questions fully, carefully and unreservedly since they are designed to secure the facts necessary to aid in bettering conditions throughout the entire public school system.

The returned questionnaires will be studied carefully and the facts contained therein will be tabulated. The summaries of and conclusions from this study will be made public as soon as possible. The fact that you are **not** asked to sign your name is assurance that your answers will be confidental and their individuality will be lost in the summaries. Please fill out the questionnaire promptly and send to Mr. R. T. Shaw, 3440 Walnut Street, Philadelphia, Pa.

QUESTIONNAIRE

1. a. What was your age on Jan. 1, 1925?.....yrs. Sex?.....
   b. What was your age at retirement?.....yrs.
   c. Would you have retired at an earlier age, not less than 62, if the retirement allowance had been greater than you now receive? (Answer Yes, No, or Doubtful).....
   ..... How much greater?.....
   d. Would you have continued in service beyond the age of 70 if permitted?.....
   .....

2. Service record (Please place in each appropriate space the proper number of years).

	As a Teacher	As a Principal, or Superintendent	x Other Service
a. In the public school system of Pennsylvania	.....yrs.	.....yrs.	.....yrs.
b. In other educational institutions in Pennsylvania (not part of public school system)	.....yrs.	.....yrs.	.....yrs.
c. In public schools outside Pennsylvania	.....yrs.	.....yrs.	.....yrs.
d. In other educational institutions outside Pennsylvania (not part of public school system)	.....yrs.	.....yrs.	.....yrs.

x Clerical Assistant, Janitor, Attendance Officer, etc.

e. Was your school service in the Pennsylvania public schools continuous?.....
If not, how many years elapsed between the time you left the public school system and your return to it?.....

f. How many years of service were accredited in determining your retirement allowance?
.....

g. What position did you hold at the time of your retirement? (Cross out words that do not apply). Teacher, Principal, Supervisor, Superintendent, Clerical Assistant, Janitor. Other position (specify).....

3. Salary.
a. What was your monthly salary the first year of your service in Pennsylvania?.....
How many months per year?.....
b. What was your monthly salary the last year of your service in Pennsylvania?.....
How many months per year?.....
c. What was your average annual salary for the last five years of service?.....
(If uncertain, approximate will do).
d. What was your average annual salary for the last ten years of service?.....
(If uncertain, approximate will do).

4. Retirement Allowance.
a. What is your annual retirement allowance?.....
b. At the time you retired did you select one of the options which the law provides?.....
..... If so, please check the option which you selected.
[ ] Option I—Value of annuities unpaid at death to go to estate.
[ ] Option II—Entire annuity to be paid after annuitant's death to wife or other relative.
[ ] Option III—One-half annuity to be paid after annuitant's death to wife or other relative.
[ ] Option IV—Some other actuarial equivalent approved by retirement board.

5. Other Income.
Please indicate by writing in the appropriate spaces the source and amount of your annual income, if any, other than your retirement allowance. (Remember, you are **not** asked to sign your name to the questionnaire, therefore please answer fully and accurately).
a. How much annual income from personal savings?.....
b. How much annual income from inheritance?.....
c. How much annual income from position taken since retirement?.....
d. Total (not including retirement allowance)?.....
e. How do you explain the fact that you did not accumulate more personal savings? Please indicate your answer by checking the appropriate words or by writing your own statement.
[ ] A large number of dependents.
[ ] Too small salary.
[ ] Education of children.
[ ] Bad investments.
[ ] Not looking ahead.
.....
.....

	Yes	No
f. Do you live with relatives or friends?	.....	.....
If so, do you pay board?	.....	.....
do you pay for room?	.....	.....
do you receive a cash allowance from them?	.....	.....
g. Do you receive any sort of aid from any source that is not included in the above?	.....	.....

h. If your retirement allowance is not adequate, what amount would meet your present minimum needs?.....
i. Have you taken up a new occupation or position?.....
If so, what?.....

6. Dependents.
a. Were you married?.....
b. Is your husband or wife living?.....
c. How old is your husband (wife)?.....
d. How many children have you?.....
e. How many of them are now dependent upon you for support?.....

f. What education have your children had? (Please indicate by placing the proper figures in appropriate spaces to show the number of years beyond 8th grade including all schools and colleges)		Present Age	Years Beyond 8th Grade
	Oldest	.....	.....
	Next	.....	.....
	"	.....	.....
	"	.....	.....

7. Membership in former local retirement system in Penna.
a. Did you contribute formerly to a local teachers' retirement system in Pennsylvania?.....
b. If so, did you get back in cash any part of your contribution to this local system?..... How much?.....
c. Did the amount returned to you include any interest accumulations?.....
d. Did the amount returned to you include any sum contributed in your behalf by your employer (School Board)?.....

8. Membership in other systems.
a. Did you contribute to any retirement association other than that referred to in Question 7, before you became a member of the Pennsylvania State system?.....
b. Did you get back in cash any part of your contribution to other systems?.....
How much?.....
c. Did the amount returned to you include any interest accumulation?.....
d. Did the amount returned to you include some contribution in your behalf by employer or (city or state)?.....

9. Education and Training.

	High School	Normal School	College	University
Attendance	.....yrs.	.....yrs.	.....yrs.	.....yrs.
Name of Institution	.....	.....	.....	.....
Degrees	.....	.....	.....	.....
Certificates held	.....			

10. If interested, will you kindly indicate below which amendments are in your judgment the most desirable. Place the numbers 1, 2, 3, 4, etc., beside them in order of importance.
[ ] a. Removal of the $1,000 maximum annuity limit now provided.
[ ] b. Credit for service beyond the age of 62.
[ ] c. Credit up to maximum of 15 years for service rendered in schools other than the public schools of Pennsylvania.
[ ] d. Credit for all service rendered in the public schools of Pennsylvania regardless of number or extent of the breaks in that service.
[ ] e. .....
[ ] f. .....
[ ] g. .....

11. Remarks: .....
.....
.....

The returned questionnaires were numbered, and if a letter was enclosed with the questionnaire it was given the same number as the questionnaire. Each questionnaire was carefully studied and numbers were given to the various items so that the data could be transferred readily to cards for use in the Hollerith

Machine[1]. Most of the data were handled in this way, but there were a considerable number of comments under the head of remarks, and in the letters, which could not be readily classified. These are referred to and quoted at appropriate places in the various chapters.

Five Hollerith cards were required for each questionnaire. For convenient reference all of the data were tabulated by the machine in parallel columns on the regular tabulating machine paper.

A uniform plan of distribution was worked out for use in tabulating the answers to each question. Answers were omitted on some of the questionnaires but these omissions are clearly indicated in each case in this uniform plan of tabulation. Whenever percentages are shown the per cent is determined on the basis of the number answering that particular question rather than on the whole number of returned questionnaires.

COMPARISON WITH OTHER STATES

All of the tables showing the comparisons between the practices of the various states were sent to the Retirement Boards of all the states included in the Tables for the purpose of securing corrections or suggestions. The group of nine states which is used in the comparative tables includes all of those state systems which have been classified by the Carnegie Foundation as organized upon sound retirement principles[2]. However, the Carnegie Foundation does not regard any existing system as absolutely sound, and it may be argued that certain other state systems so nearly approach soundness that they should have been included in this study. Upon a careful analysis of all other state systems it was found that there is no state system, outside of this group of nine, which has any sound feature that is not included in the states which are compared.

---

[1]The Hollerith machine is a mechanical device used for tabulating and distributing data of all sorts by means of cards upon which the data have been recorded by a punching device.

[2]Carnegie Foundation, Eighteenth Annual Report, 1923, p. 96.

VALIDITY OF THE DATA

The validity of the data is shown by the following comparisons of the replies to the questionnaires with the official records of the Retirement Board:

1. Age of retired employes.
2. Position held at the time of retirement.
3. Sex of retired employes.

Age of Retired Employes.—Table 1 shows the distribution of the retired employes according to age. Column A shows the number at each age according to the official records of the Retirement Board Actuary on June 30, 1924. Column B shows the number at each age as shown by the replies to the questionnaire in January, 1925. It was impossible to secure the data for these distributions on exactly the same dates but these two dates are sufficiently near together to make a fair comparison. Column C shows the ratio, indicated by per cent, of each number in Column

Table 1.—Distribution of Retired Employes According to Age as Shown by the Actuary's List as of June 30, 1924 (Column A) and Replies to the Questionnaire (Column B).

Age	Number		Percent
	Actuary's List June 30, 1924 Column A	Replies to Questionnaire Column B	B/A x 100 Column C [1]
62	12	7	58.3
63	29	18	62.1
64	28	21	75.0
65	53	40	75.5
66	50	28	56.0
67	65	33	50.8
68	47	35	74.5
69	40	28	70.0
70	69	42	60.9
71	86	48	55.8
72	82	53	64.6
73	45	35	77.7
74	38	20	52.6
75	29	20	69.0
76	28	15	53.6
77	14	9	54.3
78	22	12	54.5
79	22	16	72.7
80	16	11	68.8
Over 80	19	13	68.4
Total	794	504[2]	62.0
Range	62—over 80	62—over 80	50.8—77.7
Median	71.1	71.0	63.3
First Quartile	67.4	67.4	55.2
Third Quartile	73.8	73.7	71.4
Quartile Deviation	3.2	3.2	8.1

1 Column C shows the percentage relation between the numbers in Column A and Column B.
2 Of the 509 who replied to the questionnaire, five did not indicate their age.

B to the corresponding number in Column A. It is important to note that the variations in the percentages is not very great, 50.8 to 77.7. These extremes are approximately equidistant from 62.0 per cent which represents the ratio of the total number of replies to the total number on the Actuary's list. It is also important to note that the median age of the official list is 71.1,—only one-tenth of a year above the median age 71.0 for those who replied to the questionnaire.

Diagram No. 1 sets forth this comparison of ages in graphical form. The upper line represents the numbers on the official list at each age and the lower line represents the corresponding number of replies indicating the same age.

Table No. 1 and Diagram No. 1 indicate that the questionnaires remarkably well represent the retired employes from the point of view of age in 1925.

Positions held at the time of retirement. The positions held at the time of retirement are classified into three groups:

1. Teachers.
2. The supervisory and administrative force, including all principals and superintendents.
3. All school employes not included in the preceding classifications.*

This method of grouping is followed throughout this entire study.

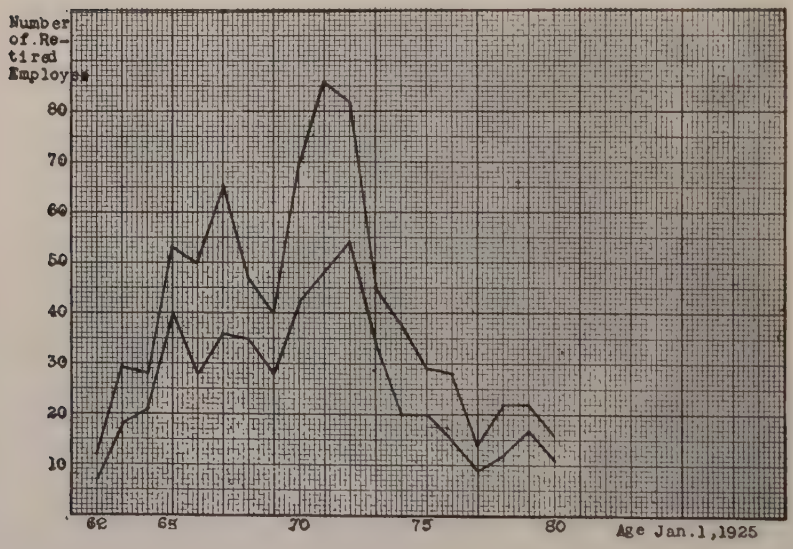
Table 2.—Distribution of Retired Employes According to Position Held at the Time of Retirement, as shown by:

	Retirement Board List June 30, 1925		Replies to the Questionnaire January, 1925	
	Number Column A	Percent	Number Column B	Percent
Teachers	601	69.5	337	66.2
Principals and Superintendents	100	11.7	93	18.3
Other Service	163	18.8	79	15.5
Total	865	100.0	509	100.0

In Table 2, Column A, is found the distribution of the retired employes according to position held at the time of retirement as shown by the official records of the Retirement Board on June 30, 1925. In Column B is found the corresponding distribution

*An examination of Table 21, page 50 will show that most of this third group had been janitors.

Diagram 1. Lower Curve—Distribution by age as of January 1, 1925, of those on the retired list who replied to the questionnaire. Upper Curve—Distribution by age as of June 30, 1924, of those on the retired list as shown by the Actuary's report.



as shown by the replies to the questionnaire. It will be noted that 601 of the 865 or 69.5 per cent of the official list were teachers as compared with 66.2 per cent of those who replied to the questionnaire; 11.7 per cent of the official list were principals or superintendents as compared with 18.3 per cent of those who replied; 18.9 per cent of the official list were from the non-instructional service as compared with 15.5 per cent of those who replied. While these comparisons are not so close as those shown in Table 1, they do indicate that the replies are a very fair representation of the entire group.

Table 3.—Number and Percentage Distribution of Retired Employes According to Sex as shown by the Records Indicated

	Retirement Board List June 30, 1925 Column A		Official Report of Actuary as of June 30, 1924 Column B		The Replies to the Questionnaire as of January 1, 1925 Column C	
	Number	Percent	Number	Percent	Number	Percent
Men	385	44.5	353	44.5	221	45.0
Women	480	55.5	441	55.5	270	55.0
Total	865	100.0	794	100.0	491[1]	100.0

[1] 18 of those who replied to the questionnaire did not indicate their sex.

Table 3 shows the comparison of the distribution according to sex. In Column A is found this distribution as indicated in the official list of the Retirement Board as of June 30, 1925. In Column B is shown the corresponding distribution for the Actuary's official report one year earlier, June 30, 1924. In Column C is given the corresponding distribution indicated by the replies to the questionnaire as of January 1, 1925. The per cent columns show that all three lists agree in a very remarkable manner. The two official lists do not differ by so much as one-tenth of one per cent and the list of replies differs from the other two by only five-tenths of one per cent.

Additional proof of the validity of the data brought out in the questionnaire is shown by comparing Table 33 with Table 35. The official list of the Retirement Board indicated in Table 35 that the median retirement allowance was $341. This compares very favorably with the median of $322 for those who replied to the questionnaire as shown in Table 33.

These four comparisons indicate that the replies to the questionnaire present facts and conditions which may be regarded as a reliable sampling of the entire group of retired employes.

The work of the Carnegie Foundation in connection with the whole retirement problem is so well-known that it is quite unnecessary to go into detail to show the validity of any data secured from its reports. It is of great interest to note that the authorities of the State of Vermont called upon the Foundation to suggest a plan of retiring teachers in that state, and that the plan now in operation is very largely as outlined by the Foundation; that the state of Wisconsin also took into consideration much of the data and opinions expressed in the published reports of the Foundation when they were devising the plan that is now in operation in that state; that in the Wisconsin Supreme Court decision[1] in regard to the Wisconsin retirement law, the reports of the Carnegie Foundation were quoted at length.

Recently the authorities of the state of Virginia called upon the Carnegie Foundation to formulate a plan for reorganizing the state wide retirement system for the teachers of Virginia.

BACKGROUND

No attempt is made in this study to go into details of the history of the pension movement. A few of the more outstanding features of its development are very briefly sketched in the following paragraphs. It is interesting to note that authorities upon the history of pension systems emphasize the fact that once a pension system is established it is very difficult to correct unsound features. This probably accounts, in part, for the fact that while European systems are much older than those of the Australian states and of New Zealand[2], the latter are more frequently used as illustrations of soundness. The European countries were hampered by the existence of old systems whereas New Zealand, New South Wales and others could start afresh, profiting by the experiences of Europe.

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[1]Supreme Court, State of Wisconsin, Wisconsin Teachers Association, Madison, 1923.

[2]Carnegie Foundation, Bulletin No. 12, 1918, p. 77.

THE PENSION MOVEMENT IN THE UNITED STATES

First Stage. A systematic plan for the retirement of school teachers in America is relatively a very recent development[1]. The earliest efforts appeared in the latter part of the Nineteenth Century in the form of teachers' assistance or teachers' beneficial associations. Their efforts were more in the direction of the problem of disability than of superannuation. They were voluntary, entirely supported by the teachers, and in many cases poorly managed. They, however, partially filled the need and contributed much toward emphasizing the importance of having a carefully organized plan.

The Department of Superintendence of the National Education Association[2] at its annual convention held in Philadelphia, February, 1891, adopted the following resolutions: "Justice as well as the best public service requires the retirement and pensioning of teachers after a service of thirty years, and upon carefully devised conditions. We recommend the enactment of laws in the several States to permit and to regulate the retirement and pensioning of professional teachers." This appeared to be the first definite move in the United States towards the establishment of retirement provisions for all teachers.

Second Stage. The second stage in the development was the establishment of the so-called free pensions[3]. This idea reached its height very early after the opening of the twentieth century. The teachers did not contribute in this plan, and in many cases there was no systematic provision for the source of funds, gifts and legacies making up the main bulk. There was little or no system in the amount of the pension or the age at retirement. Charitable, political and social influence[4] dominated the decision in almost every case.

Third Stage. The third stage of development was in the direction of a contributory system in which both teachers and public

[1]Studensky, P., Teachers Pension Systems in the U. S., D. Appleton, pp. 3-16.

[2]Proceedings of the National Education Association, 1896.

[3]Studensky, P., Teachers Pension Systems in the U. S., D. Appleton, pp. 3-16.

[4]Carnegie Foundation, Bulletin No. 12, 1918, p. 4.

contributed to the fund out of which the pension was to be paid. No actuarial calculation was made to determine the amounts which should be contributed to meet the liabilities assumed and the systems were therefore destined to meet serious trouble[1].

Fourth Stage. The fourth stage was marked by the determination to have the system actuarially sound[2]. A system cannot be regarded as actuarially sound unless there is set aside, each year, a sum which, with interest accumulations, will be sufficient to pay the cost of that portion of the retirement allowance planned to be payable for that particular year of service. Unless sums are so set aside benefits cannot be regarded as certain, and the security which a sound system should afford is wanting.

A system which was not definite and dependable could not accomplish its purpose. Another outstanding characteristic of this stage was the desire to get away from the word "pension" and substitute for it the words "retirement allowance" or "retiring allowance," more dignified terms to be applied to benefits jointly purchased and jointly shared.

THE RETIREMENT SYSTEM IN PENNSYLVANIA

Pennsylvania has passed through the first three stages and is now in the fourth stage. Some of the more powerful of the mutual benefit associations[3] of the first stage still continue to function but are totally independent of the present retirement system. The free pension movement never made any headway as a state-wide development in Pennsylvania. The law of 1907 granted permission to local districts to establish retirement systems according to their own discretion, and there was a wide variation in the provisions set up in the thirteen local systems[4] which developed. Some were inclined toward a free pension type,

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[1]Studensky, P., Teachers Pension Systems in the U. S., D. Appleton, pp. 15-26.

[2]Carnegie Foundation, Eighteenth Annual Report, 1923, p. 96.

[3]Teachers Beneficial Association, Philadelphia, Pa., Educators Beneficial Association, Lancaster, Pa.

[4]Altoona, Chester, Erie, Harrisburg, Lancaster, Lower Merion Twp., Meadville, Norristown, Philadelphia, Reading, Scranton, Wilkes-Barre and Williamsport.

several were jointly contributory but not on a sound basis and only one, the Erie system, was drawn up on an actuarial basis.

THE PENNSYLVANIA LAW OF 1917

The Pennsylvania Legislature of 1917 passed a law providing for statewide public school employe retirement on an actuarial and jointly contributory basis. This law provided that the local retirement systems could continue independently, or, by fulfilling certain conditions, could merge with the State System. All of the local systems have taken advantage of this provision, and therefore, the State System is inclusive of all school districts.

Membership was made compulsory for all school employes who received their first appointments after July 1, 1917, whereas those who had received their appointments prior to that date had the privilege of remaining out of the system if they so desired. The former were designated in the law as "New entrants" and the latter as "Present employes." July 1, 1919, was set as the date prior to which application must be made by "Present employes" if they desired to become members of the system. "Present employes" who were already members of local retirement systems could not make application individually but could become members only if the local system combined with the state system. A two-thirds vote of the members of a local system and of the local school board was required before a local system could be amalgamated with the state system. By July 1, 1919 a very large majority of "present employes" had become members but still there were a considerable number who through carelessness or otherwise had not taken advantage of their opportunity and the result was that the Legislature of 1923 was persuaded to amend the law by extending this date to July 1, 1924.

MEMBERSHIP IN THE PENNSYLVANIA SYSTEM

At the time the Actuary Mr. George B. Buck made his study preparatory to the passage of the law in 1917, there were approximately 43,000 school employes in Pennsylvania. Of the 43,000 who were "present employes" on July 1, 1917, only about 17,000 remain who have taken advantage of the opportunity to

be so classified under the law. The fact that there were only 37,503 members of both classes in 1919 indicates that six or seven thousand employes had not joined at that time. Doubtless many of these since that time have left the school system for one reason or another. Some had not yet come to understand fully the retirement system and have since joined; and some who left the service have returned and have permitted themselves to be classified as "New entrants" rather than to make up the payments necessary in order to be classified as "present employes."

The distribution of the membership of the Pennsylvania system from June, 1919 to June, 1925 is shown in Table 4.

Table 4.—Number and Distribution of the Membership of the Pennsylvania Retirement System According to the Official Records of the Retirement Board as of June 30 Each Year From 1919-1925 (inclusive)

Year as of June 30	Number of Present Employes	Number of New Entrants	Total Members
1919	20,725	16,778	37,503
1920	20,312	18,156	38,468
1921	19,542	22,465	42,007
1922	18,896	27,260	46,156
1923	18,175	32,739	50,914
1924	17,937	36,704	54,677
1925	17,073	41,336	58,409

The numbers shown in this Table were secured from the official records of the Retirement Board as of June 30 each year 1919-1925 inclusive. It is estimated by the secretary of the Retirement Board that in March, 1926 there were only about 500 school employes in Pennsylvania who had not taken advantage of their opportunity to become members of the retirement system. During these six years the total membership has increased from 37,503 to 58,409. During the same period the number of "New entrants" has increased from 16,778 to 41,336. On the other hand, the number of "Present employes" has decreased from 20,725 to 17,073. Withdrawals and deaths account for this decrease, for it must be remembered that either a "Present employe" or a "New entrant" who withdraws or dies is replaced by a "New entrant" in the vast majority of cases.

In Table 5 is shown the number of employes whose names were on the superannuation retired list on June 30 of each year since the law of 1917 took effect. At the end of the first year there were 193, and at the end of the fifth year there were 967. This, of course, does not include any who, subsequent to retirement, had died prior to the dates indicated.

Table 5.—Number and Average Retirement Allowance of Superannuation Annuitants According to the Official Records of the Retirement Board as of June 30 Each Year from 1919-1925, (inclusive)

Year as of June 30	No. of Superannuation Annuitants	June Total Payroll	Average per Anuitant Per Year
1920	193	$ 4,181 56	$259 92
1921	427	10,699 93	300 60
1922	565	14,770 86	313 68
1923	690	19,543 63	339 84
1924	796	23,989 29	361 56
1925	967	29,806 11	369 84

Table 5 also shows the average annual retirement allowance as calculated from the June payroll each year from 1920 to 1925 inclusive. In June, 1920 this average annual allowance amounted to $259.92. From this point it gradually increased until it was $369.84 in June, 1925. This increase was due to the effect of the larger salaries which had been paid during these years.

THE PURPOSE OF A RETIREMENT SYSTEM

The purpose of a retirement system is manifold. Too often those who are considering it base their thoughts and opinions on view points that are peculiarly their own; the teacher is apt to look at it only from her view point, the superintendent from the view point of the administrator and the board member from the point of view of the public. Any system which does not benefit both employer and employe is almost certain to fail. It is likewise true that any system which is not so devised as to consider the needs of one group of employes as distinguished from those of another is almost certain to have many difficulties.

The Pension Fund Commissions of various states and cities and also the Carnegie Foundation together with students specializing in the pension field have all given careful consideration to

the many-sidedness of the purpose. The condensed statements of purpose as expressed by some of these authorities are of interest:

The New York City Commission on Pensions[1] emphasizes that "such funds should be the means of increasing efficiency of service," adding the following: "pension schemes need, first of all, to be revised on the basis of principles of service, efficiency and equity. The question of equalizing pensions and resources is a mathematical process which must naturally follow after the main problems are satisfactorily settled."

In a bulletin published by the Carnegie Foundation[2] it is stated "The function of a pension system is to secure to the individual who participates in it protection against the risk of dependence due to old age or to disability....Teachers' pensions should be stipendiary in character, amounting to a fair proportion of the active pay."

In the introduction to "The Teacher and Old Age" by Prosser and Hamilton[3], David Snedden, then Superintendent of Public Schools of Massachusetts, the first of the nine states to adopt a sound teachers' retirement system, expressed the purpose of a retirement system as follows:

a. To provide humane and satisfactory retirement to workers who can no longer render the grade of service required.
b. To give those still in the active period of their service a sense of security and opportunity for undivided attention to the calls of the profession.

A circular issued by The Pennsylvania Retirement Board contains the following statement of reasons for a school employes' retirement system:

a. The elimination from active school service of those who have lost their efficiency because of advancing age, or mental or physical disability;
b. The improvement of the morale of those who remain in service;

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[1]New York City Commission on Pensions, 1915, p. 16.
[2]The Carnegie Foundation, Bulletin No. 12, 1918, p. 15.
[3]Prosser, C. A. and Hamilton, W. I., The Teacher and Old Age, Houghton Mifflin Co., p. viff, 1913.

c. The retention in the service of the best of the present employes, many of whom in the absence of such a system resign to accept positions elsewhere; and
d. The attraction to the service of a higher grade of employes.

These opinions point out very clearly that *the primary purpose of a school employe retirement system is to improve the school system.* It is also quite clear that this purpose is to be accomplished:

1. By removing the unfit.
2. By making the system more attractive to employes.
3. By making it possible for employes to give their attention primarily to their professional duties without the pre-occupation that the problems of making provision for old age require.

ORGANIZATION OF MATERIAL

The material collected has been divided into two main groups, first, that which pertains to the actual working out of the provisions of the Pennsylvania law and comparison with the corresponding provision of other state systems (Part I), second, facts which pertain to the economic conditions of the retired employes (Part II).

Part I consists of four chapters as follows:

Chapter I. Age.
Chapter II. Service.
Chapter III. Salary.
Chapter IV. Costs and benefits.

Part II consists of five chapters as follows:

Chapter V. Education and Training.
Chapter VI. Retirement allowances.
Chapter VII. Income other than retirement allowance.
Chapter VIII. Dependents and present occupation.
Chapter IX. Amendments proposed.

In the concluding chapter, the most important facts brought out in these chapters are summarized and evaluated in the light of generally accepted purposes of a retirement system, as shown by the practice in other states and authoritative opinions in this field.

PART I

REGULATIONS AND BASIS OF SUPERANNUATION RETIREMENT IN PENNSYLVANIA AND THE CORRESPONDING PRACTICES IN OTHER STATES

INTRODUCTORY

THE exact amount of a retirement benefit which is justifiable in the light of its purpose is by no means a settled question. The earlier interpretation took the form of a flat amount granted only at the end of a stated period of service. No consideration was given to the question of age at the time of retirement nor of salary at any time during the period of active service. No gradations in amounts were provided for different lengths of service. The thought appeared to be to give the old teachers something to get them out of the way so that more efficient teachers could be put in their places. Such procedure naturally led to complaints of all sorts. In more recent years the thought has been that the retirement allowance should bear some simple ratio to active salary and should be graduated also according to length of service. Some of the opinions gathered from the secondary sources mentioned in the introduction are submitted herewith to show the modern trend of thought on this question.

The Carnegie Foundation[1] states "The amount of a pension should in general be sufficient to furnish adequate subsistence in cases of disability or old age retirement; under a soundly constructed plan the amount will vary with the salaries received during service and will be based on accumulated contributions. Generally speaking, an adequate allowance for old age can be built up on contributions of ten per cent annually, equally shared by the public and the teacher, provided that contributions are begun before the age of forty."

Lewis Meriam[2] offers the following suggestion, "For the employe who

[1]Carnegie Foundation, Seventeenth Annual Report, p. 124.
[2]Lewis Meriam, Principles Governing the Retirement of Public Employes, p. 415, D. Appleton and Co.

has spent his life in the service the general rule would seem to be that the benefit should be not less than the minimum of subsistence for an employe of the compulsory superannuation age and his dependents at that age, nor should it exceed a sum which will purchase the necessaries of the employe's standard of life at that age."

Paul Studensky[1] writes, "The amount of a pension has generally been fixed by precedent. Particularly is this true of the half pay pension idea so generally accepted abroad in retirement plans for public employes, which was adopted in the United States in the first established pension systems and then imitated by those of more recent origin....No attempts have been made in existing systems carefully to ascertain what minimum benefit will be sufficient from the point of view of economic needs of the teacher and the effectiveness of the system."

The National Education Association[2] recommends that "The Retirement annuity should be sufficient to enable the retiring teacher to live in reasonable comfort, thereby removing temptation to remain in the classroom beyond the period of efficient service."

Other writers express opinions which agree largely with the generalizations contained in the foregoing quotations.

THE HALF-PAY IDEA

There seems to be very little explanation of the half-pay idea except precedent. That the heaviest financial burdens of life, such as support of dependents, education of children and purchase of home, are lifted or greatly reduced by the time retirement age is reached, is a belief which is quite general and probably can be shown to be correct in the majority of cases. (See Tables No. 44 and No. 49.) It would, however, be difficult to show that the financial burden has sufficiently decreased to permit a reduction to one-half the income without a great revision downward in the standard of living. In fact, illness and accident are usually regarded as more prevalent in the later years of life, and in such cases the cost of living will certainly be increased rather than reduced, except in so far as the items above mentioned are concerned.

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[1]Paul Studensky, Teachers' Pension Systems in the U. S., pp. 64, 73. D. Appleton and Company.

[2]Committee of One Hundred on the Problem of Retirement Allowances, 1924 Report.

The practice in most systems has been to so limit the benefit that the allowance actually granted rarely exceeds one-half salary and usually is considerably less. The result is that teachers are remaining in service until they are forced out and the system is therefore failing to accomplish one of its main purposes, namely, the elimination of the unfit as soon as they become unfit. The cost of the older[1] half-pay pension systems was met entirely by the employer. In the adoption of the contributory system, in which the teacher pays half the cost, there is much less reason for limiting the allowance to half pay, for the employer or the public is, in this case, providing an allowance of only one-fourth pay while the half-pay limit remains in force.

THE PENNSYLVANIA SUPERANNUATION BENEFIT

The Pennsylvania Law of 1917[2] gave consideration to age, service and salary in providing the method of determining the allowance, but bound each of them up with certain limitations. In general, the limitations seem to be centered around the idea that half-pay allowance should be granted at age sixty-two to any teacher who has served forty years; other allowances were to be proportional to length of service and to salary provided, however, that no retirement allowance should exceed approximately $1,000[3]. The Retirement Allowance at present consists of four parts:

First, an *employe's annuity.* The exact cost of this annuity is represented by the contributions of the teacher together with interest accumulations thereon.[4]

Second, a *State annuity.* This annuity is determined by dividing the "final salary"[5] by 160 and multiplying the quotient by the number of years of public school service in Pennsylvania.[6]

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[1]Police pension systems, the Pennsylvania Railroad and many others.
[2]The text of the law as amended is given in full with annotations in Appendix I.
[3]Amended in 1925. See Appendix II.
[4]The rate of contribution of each teacher is determined upon the basis of sex and also on the basis of age on July 1, 1919 or at the time of entering the system if employe entered the system after that date.
[5]"Final salary" equals the average annual salary for the last ten years preceding retirement.
[6]Prior to the amendments of 1925, service after the age of 62 was not counted in determining this part of the Retirement Allowance.

Third, *A further State annuity.*[1] This annuity is determined by dividing the "final salary" by 160 and multiplying the quotient by the number of years of public school service in Pennsylvania prior to July 1, 1919.[2]

Fourth, *An additional annuity.* This annuity applies only to those who were formerly members of a local retirement system. The amount of this additional annuity is determined by the total contribution to the local retirement system and the age of the employe at retirement.

It is quite evident that the third and fourth parts will ultimately drop out of consideration entirely.

Each of the factors entering into the determination of the Pennsylvania superannuation benefit, together with the various limitations placed upon them, will be taken up in detail in the following chapters, and the actual results of their application will be shown.

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[1]This is the provision made to meet the teacher's share of costs for service rendered prior to July 1, 1919.

[2]The original law of 1917 provided that the total "state annuity" should in no case exceed 50 per cent of "final salary." This provision was stricken out by the amendments of 1925.

CHAPTER I

AGE

ANY given retirement allowance payable throughout life and granted at age of fifty costs vastly more than the same allowance granted at age of sixty. It is likewise true that a given amount of money will purchase a greater annuity at age sixty than the same amount will buy at age fifty.

If a teacher contributes $60.00 per year, the amount including interest accumulations, will, at the end of 40 years be approximately $6,000. This amount will purchase at age 62 a life annuity of approximately $500. If contributions are kept up only four more years the amount will have become approximately $7,200 and the annuity purchasable at the age of 66, with $7,200 will be approximately $700. It should be noted that, of the increase from $6,000 to $7,200, $960 was due to the interest on the sum already accumulated.

Meriam[1] states "In considering the ages the parties must never lose sight of the costs. Low retirement ages mean extremely high costs and high ages extremely low costs. A matter of a year or two is never one to be treated lightly. The English system for civil servants permits superannuation retirement at age sixty and compels it at sixty-five with the exception that under special circumstances an employe may be continued to age seventy.... The minimum permissive age is established as the milestone at which the presumption of declining ability is sufficiently strong to permit of the waving of the strict requirements for concrete proof of disability."

PROVISIONS AND PRACTICES IN THE NINE STATES

Thirty-one[2] states now have laws affecting teacher retirement. Of the thirty-one, only nine have laws regarded as actuarially

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[1]Meriam, Lewis, Principles Governing Retirement of Public Employes. D. Appleton and Company. 1918.

[2](a) Twenty-two states have state wide Teacher Retirement Laws: Arizona, Calif., Conn., D. C., Ill., Ind., Me., Md., Mass., Mich., Minn., Mont., Nev., N. J., N. Y., N. Dak., Ohio, Pa., R. I., Vt., Va., Wis.

(b) Nine more states have State Teacher Retirement Laws Affecting Cities of the First and Second Class: Colo., Kan., Ky., Iowa, La., Ore., Utah, Wash., W. Va.

sound.[1] The provisions of these nine systems in regard to retiring age are shown in Table 6.

Table 6.—Comparison of the Regulations of the Nine States in Regard to the Retirement Age

	Conn.	Maine	Mass.	N. J.	N. Y.	Ohio	Penna.	Vt.	Wis.
Minimum									
Permissive Age to receive benefits of									
a. Teachers contributions.....	60[1]	60	60	62	60	60	62	60[8]	None [7]
b. State's contributions.....	60[1]	60	60	62	60	60	62	60[8]	50
Maximum									
Age limit.....	70[2]	None[3]	70	70[4]	None	None[5]	70	None	None

[1] Sixty years of age or 35 years of service, at least 20 of which must be in the public schools of Connecticut.
[2] The law provides that "if the employing committee shall so request in writing, the retirement board may permit the employment of such member beyond the age of 70 years."
[3] May be retired any time after age of 60, if incapable of rendering satisfactory service.
[4] Effective January 1, 1926.
[5] Retirement compulsory at age 70 "provided in each case the consent of the employer is secured." This last provision practically nullifies the compulsory retirement age.
[6] 60, if a woman; 65, if a man.
[7] A large list of options ranging from a cash single payment to various types of life annuities to begin at any age selected by the teacher after age 50.

It will be noted that some of these states have a service requirement in addition to the permissive age and some allow a long period of service to be equivalent to the permissive age. Some states have a service requirement only, and some states require proof of impaired ability in addition to either or both of the other requirements.

PROVISIONS, REGULATIONS AND PRACTICE IN PENNSYLVANIA

Age is a factor in determining the amount of the first and fourth parts of the retirement allowance referred to on page 31, but it is not a factor in determining the second and third parts. The actuary, of course, took age into consideration in working out the rates to be paid by the state to provide the necessary funds to pay the state annuities when due.

A study of the following tables will show how the Pennsylvania provisions have been actually working out during the first five years of administration of the Retirement Law.

Present Age of Retired Employes. Table No. 7 shows the distribution of the replies according to sex, position at the time of retirement, and age attained on January, 1925.

[1] See introduction. Page 5.

Table 7.—Distribution of Replies to the Questionnaire According to Age Attained January 1, 1925

AGE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
62	4	2	...	6	...	...	...	...	...	1	...	1	4	3	...	7
63	5	7	...	12	4	1	...	5	...	1	...	1	9	9	...	18
64	6	8	...	14	1	1	...	2	5	...	...	5	12	9	...	21
65	2	30	1	33	3	2	...	5	2	...	...	2	7	32	1	40
66	5	16	1	22	3	3	...	6	...	...	...	...	8	19	1	28
67	6	19	1	26	3	1	...	4	2	1	...	3	11	21	1	33
68	10	15	1	26	6	3	...	9	...	...	...	...	16	18	1	35
69	7	13	...	20	2	2	...	4	4	...	...	4	13	15	...	28
70	5	16	2	23	3	7	...	10	7	1	1	9	15	24	3	42
71	11	21	...	32	6	2	...	8	8	...	...	8	25	23	...	48
72	8	20	2	30	5	8	...	13	9	1	...	10	22	29	2	53
73	7	12	1	10	5	3	...	8	6	1	...	7	18	16	1	35
74	3	8	...	11	3	2	...	5	4	...	...	4	10	10	...	20
75	3	11	1	15	2	...	...	2	1	1	1	3	6	12	2	20
76	4	4	...	8	1	1	1	3	4	...	...	4	9	5	1	15
77	1	3	...	4	1	1	0	2	3	...	...	3	5	4	...	9
78	5	4	...	9	1	1	...	2	...	1	...	1	6	6	...	12
79	6	8	...	14	...	...	...	...	2	...	...	2	8	8	...	16
80	1	1	...	2	3	...	...	3	6	...	...	6	10	1	...	11
81	...	1	...	1	1	...	...	1	2	...	1	3	3	1	1	5
82	1	1	...	2	...	...	...	...	1	...	1	2	2	1	1	4
∞3 and over	2	1	...	3	...	...	...	...	...	1	...	1	2	2	...	4
Total	102	221	10	333	53	38	1	93	66	9	4	79	221	268	15	504
No Answers	0	2	2	4	0	0	1	1	0	0	0	0	0	2	3	5
Grand Total	102	223	12	337	53	38	2	94	66	9	4	79	221	270	18	509
Median				69.4				71.1				72.7	71.6	70.3		71.0
First Quartile				66.2				68.1				70.4				67.4
Third Quartile				73.3				73.4				76.6				73.7
Quartile Deviation				3.6				2.6				3.1				3.2

Of the 509 who replied to the Questionnaire, 337 had been teachers, 93 had been principals or superintendents and 79 had been public school employes in service that was not instructional. A very large percentage of the 79 had been janitors (probably in the larger cities) as will be shown later in Table 21.

The law was passed by the Legislature of 1917 and took effect July 1, 1919. The compulsory age of 70 or over forced out a number who were considerably over 70 and explains the fact in Table 7 that some retired employes are more than 80 years of age in spite of the fact that the system has been in operation only five years. It also explains that portion of Table 8 which indicates the number who retired at ages above 70. In time, of course, these annuitants will die and there will be none left who retired at ages above 70.

The medians of the age grouping in Table No. 7 show very little variation as to sex or service although the median for women is somewhat lower than that for men, and the median for "other service" is somewhat higher than those for the instructional groups. Comparing this with Table No. 8, it will be observed

Table 8.—Distribution of Replies to Questionnaire According to Age at Time of Retirement

AGE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
62	18	38	2	58	9	3	...	12	3	3	...	6	30	44	2	76
63	6	22	...	28	4	5	...	9	1	...	...	1	11	27	...	38
64	3	16	...	19	4	1	...	5	5	...	...	5	12	17	...	29
65	6	17	1	24	2	3	...	5	1	...	...	1	9	20	1	30
66	5	18	1	24	2	3	...	5	2	...	...	2	9	21	1	31
67	6	14	...	20	3	1	...	4	2	...	...	2	11	15	...	26
68	4	15	2	21	2	3	...	5	4	...	1	5	10	18	3	31
69	5	11	1	17	2	1	...	3	3	...	1	4	10	12	2	24
70	28	46	3	77	17	14	1	32	23	4	...	27	68	64	4	136
71	2	5	...	7	2	1	...	3	5	...	1	6	9	6	1	16
72	4	5	...	9	...	1	...	1	4	1	1	6	8	7	1	16
73	72	2	...	9	...	2	...	2	1	...	...	1	8	4	...	12
74	4	6	...	10	1	...	...	1	...	...	...	...	5	6	...	11
75	2	4	...	6	1	...	...	1	6	...	...	6	9	4	...	13
76	...	...	...	...	2	...	...	2	3	...	...	3	5	...	...	5
77	1	1	...	2	...	...	...	...	2	...	...	2	3	1	...	4
78	...	1	...	1	...	...	...	...	1	1	...	2	1	2	...	3
79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
81	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
83 and over	1	...	1	2	...	...	...	...	...	...	...	...	1	...	1	2
Total	102	221	11	334	51	38	1	90	66	9	4	79	219	268	16	503
No Answer	...	2	1	3	2	...	1	3	...	...	...	...	2	2	2	6
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Median				67.7				69.2				70.5				68.7
First Quartile				63.9				74.7				68.6				64.4
Third Quartile				70.5				70.6				72.0				70.7
Quartile Deviation				3.3				3.0				1.7				3.2

that the difference between the median ages of men and women at retirement is 2.7 years whereas the same groups on January 1, 1925 differed by only 1.3 years. This strongly favors the estimate made by the Actuary before the system was established, namely, that women annuitants will retire earlier and live longer than men annuitants and therefore should pay a higher premium rate. This point of view of the Actuary is also sustained by various authori-

ties, for example the following[1]: "Present retirement provisions make no distinction between the benefits of men and women teachers who contribute the same percentage of salary. This is inequitable to the men teachers, whose pensions are less costly than those granted to women teachers. In the first place, the mortality among men pensions is higher than among women pensioners, resulting in a comparatively smaller number of pension payments. Secondly, men teachers remain in active service longer than women teachers and therefore contribute to the fund a larger proportion of the cost of their pensions."[1]

Age at Retirement.[2] Table 8 shows the distribution of the retired employes according to their age at the time of retirement. It will be noticed that women teachers are inclined to retire at a younger age than men teachers but that the reverse is true in the case of principals and superintendents. The median age of retirement for teachers is 67.7 as compared with 69.2 for supervisory force and with 70.5 years for "other service." The variation as shown by the quartile deviation is very nearly uniform for all groups. It will be noted that there is a very strong tendency to retire either at 62 or at 70 with a much greater proportion at 70. See also Diagram 2.

Effect of Retirement Allowance Upon the Time of Retirement. Table No. 9 shows what bearing the amount of the retirement allowance had upon the date of retirement of those who replied to the questionnaire.

A small proportion, 12.9 per cent, indicated that they would have retired earlier if the retirement allowance had been greater. A great many who answered "No" added the remark "enjoyed the work." Many of the "doubtful" ones did not indicate an amount but added "I worked so long at such low salaries that I had to keep on as long as I was permitted." More men than women indicated "Yes" for an answer but a larger number of women than men were "doubtful."

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[1]New York Commission on Pensions Report, 1915, page 20.

[2]"In Mass. the highest percentages are at the minimum age of 60 and the maximum age of 70." E. S. Cogswell, Sec'y Massachusetts Pension Fund Commission, 1923-1925.

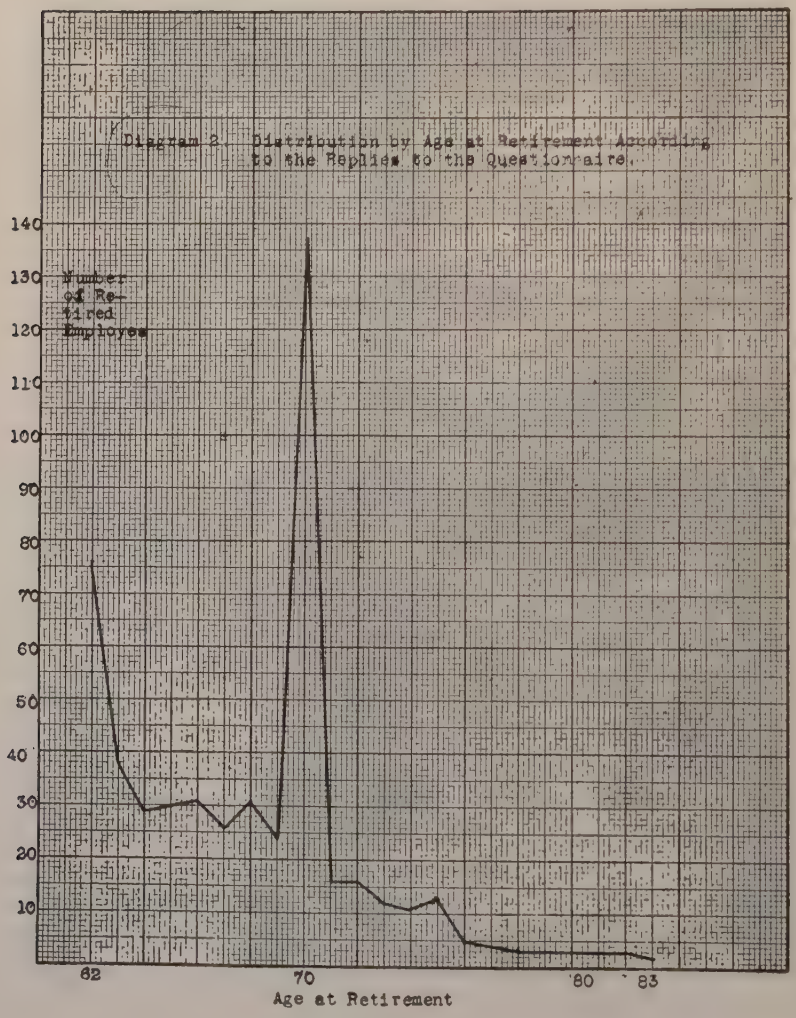
Diagram 2. Distribution by Age at Retirement According to the Replies to the Questionnaire.
Number of Retired Employes
140
130
120
110
100
90
80
70
60
50
40
30
20
10
62
70
80
83
Age at Retirement

Table 9.—Distribution of Replies According to the Opinions of the Retired Employes as to Whether they would have Applied for Retirement Earlier if Retirement Allowances had been Greater

Teachers	Yes	No	Doubtful	No. of Answers	No. not Answering	Total
Men	13	71	12	96	6	102
Women	23	137	49	209	13	222
Sex not indicated	.....	4	6	10	3	13
Total	36	212	67	318	22	337
Principals and Superintendents						
Men	12	33	7	52	1	53
Women	6	23	6	35	3	38
Sex not indicated	.....	1	.....	1	1	2
Total	18	57	13	88	5	93
Other Service						
Men	7	46	10	63	3	66
Women	.....	8	1	9	.....	9
Sex not indicated	1	2	.....	3	1	4
Total	8	56	11	75	4	79
Grand Total	62	325	91	471	31	509
Per cent of those answering	12.9	68.1	19.0	100		

Table No. 10 shows the amounts which were indicated as desired in order to have been willing to retire earlier, but not at an earlier age than 62.

Table 10.—Distribution of the Replies According to the Amounts Indicated in Answer to the Question "How Much Greater"

Teachers	$0–99	100 to 199	200 to 299	300 to 399	400 to 499	500 to 599	600 to 699	700 to 799	800 and over	Answering	No Answer	Total
Men	4	3	6	2	1	3	1	0	1	21	81	102
Women	1	3	4	3	3	4	2	1	1	22	200	222
Sex not indicated	...	...	...	...	...	...	...	...	...	.....	13	13
Total	5	6	10	5	4	7	3	1	2	43	294	337
Principals and Superintendents												
Men	1	4	1	1	1	1	...	...	.....	9	44	53
Women	1	2	1	1	1	1	...	...	.....	7	31	38
Sex not indicated	...	...	...	...	...	...	...	...	.....	.....	2	2
Total	2	6	2	2	2	2	...	...	.....	16	77	93
Other Service												
Men	6	3	...	1	...	...	...	...	.....	10	56	66
Women	...	...	...	...	...	...	...	...	.....	.....	9	9
Sex not indicated	...	...	...	...	...	...	...	...	.....	.....	4	4
Total	6	3	...	1	...	...	...	...	.....	10	69	79
Grand Total	13	15	12	8	6	9	3	1	2	69	440	509
Percent of total answers	18.6	21.4	17.1	14	8.7	14.3	4.3	1.4	2.8	100		

Median Amount $258. plus

The striking thing in answer to this question was the modesty of the request. Table 10 shows that the highest amount was only $800 and there were only two of these. Among 70 who indicated an amount, 13 stated less than $100 and the median amount was

slightly over $258. A further interpretation of this table will be made in connection with the study of Table No. 46.

Compulsory Retirement Age. Table 11 shows the opinion of the retired employes in regard to compulsory retirement at age 70.

Table 11.—Distribution of Replies According to the Desire to Continue after the Age of 70 if Permitted

		Yes	No	Doubtful	No. of Ans.	No Ans.	Total
Teachers	Men	51	32	10	93	9	102
	Women	92	94	23	209	13	222
	No sex indicated	7	1	2	10	3	13
	Total	150	127	35	312	25	337
Superintendents and Principals	Men	31	15	5	51	2	53
	Women	20	16	3	39	.....	39
	No sex indicated	1	.....	.....	1	1	2
	Total	52	31	8	91	3	94
Other Service	Men	43	15	4	62	4	66
	Women	6	3	.....	9	.....	9
	No sex indicated	3	1	.....	4	.....	4
	Total	52	19	4	75	4	79
Grand Total		254	177	47	478	32	510
Per cent of Those Answering		53.1	37.1	9.8	100		

The desire to continue in service after age 70 seems to dominate a majority of those retired. 254 out of 478, or 53.1 per cent of those answering indicated such a desire, and 47 were doubtful. This is about as might be expected, in fact there might easily have been a larger percentage when it is recognized that it is quite natural for those who have reached that age to desire to continue in their activity unless they have definitely planned and looked forward to retirement at a particular age. Undoubtedly, as time goes on, school employes will look forward to retirement with such definiteness and forethought that a constantly decreasing number will have any desire to remain after age 70.

The provision for optional retirement several years earlier than compulsory retirement is generally accepted as good policy. The limits, however, of 62 and 70 have been criticized to some extent. There is some opinion that 62 is not low enough and some that 70 as a compulsory limit is too low. As shown in Table No. 6, the most common practice in other states is 60 for the permissive age. The age of 70 appears to be enforced as a compulsory age limit in Massachusetts, Pennsylvania and New Jersey; it also appears to be the intent of the law in Ohio and Connecticut.

To lower the sixty-two limit, it would obviously be necessary to reduce the retirement allowance or to increase the cost to the teacher and to the public. Teachers may possibly be willing to stand the reduction in allowance or the increase costs but no system has been in existence in America long enough to determine whether the public would be willing to stand for the increased cost. Systems which permit retirement at *much* lower ages, 50-55, are not at the present time fully meeting their obligations unless they are also providing a much smaller allowance. Wisconsin is working on the plan that the contributions, both public and individual, shall always be set aside to provide an annuity in old age whether the teacher remains in the system or not.

Many authorities now join in interpreting the contribution of the public as a part of the pay of the teacher. They agree that the public's share should be paid annually and should, thereafter, be the property of the teacher; that it should be reserved to provide a retirement benefit if the teacher continues in the school until retirement occurs; or, if the teacher dies, it should be paid to the teacher's estate; or, in the case of resignation or withdrawal, it should be at the disposal of the teacher. Under such a plan there would seem to be no need for a permissive age regulation at all. From the point of view of an actuary it is no more costly to pay a certain sum in cash than it is to contract to provide the annuity which that amount of cash will buy. If a teacher who resigns, can withdraw all of the accumulated contributions in his behalf, it certainly will be no more costly to provide him with the annuity which may be purchased by his accumulations.

Recent articles in the *Annalist*[1], describing the collapse of Industrial systems point out striking examples of benefits which become mere scraps of paper when inadequate provision is made for meeting the costs. In the Pennsylvania Retirement System the public is carrying an abnormally large burden in the form of liabilities accrued for services rendered prior to the establishment of the retirement system. The Pennsylvania Retirement Board has frequently emphasized the fact that, until the reserve to meet

[1]*The Annalist*, Nov. 30, Dec. 6, Dec. 13, 1925.

these accrued liabilities is built up, it will be unwise to make changes involving increased costs no matter how meritorious the changes may be.

SUMMARY

There seems to be no valid reason why the minimum age of 62 should not be lowered to 60 or even to 58, provided it is clearly understood that the annual allowance will be considerably less for those who retire at the earlier ages. In fact it seems that such a policy would assist in several ways to carry out one of the main purposes of the retirement system,—the elimination of the unfit. Teachers who are physically fit and who are happy in their work will doubtless continue beyond any permissive age for one or more of the following reasons:

1. To continue to enjoy the work.
2. To continue to have full salary to spend.
3. To continue to increase the retirement allowance.
4. To avoid being regarded as "laid on the shelf."
5. To "die-in-the-harness."

On the other hand there will be some who will take advantage of the permissive age because they are unhappy in the work and wish either to change to another occupation or a "chance to rest" or who are physically or mentally so weakened that they desire to give up the work in order to be relieved of the strain and at the same time are not quite so disabled as to be able to qualify for the disability allowance.

It is believed that, in a system which is designed to provide half-pay at approximately sixty years of age and scaled down for lower permissive ages, the deterring factor of the smaller allowance at the earlier ages would prevent the more desirable teachers from leaving, and further it is probably true that the school system would be better off without those who under such circumstances would take advantage of the lower permissive age.

CHAPTER II

SERVICE

THROUGHOUT the entire history of the retirement allowance movement the retirement allowance itself has been connected in some way with the idea of some service rendered. It was natural, therefore, that early in the history, pensioners, at least, should get the idea that "more service" was entitled to "more pension."

It seems no more than fair that, other things being equal, those who have served the longest should receive the largest retirement allowance. Those who oppose this thought argue that the public owes only subsistence to the retired public employe and that length of service in no way affects this cost. Those, who favor it, base their argument chiefly upon the "deferred pay" idea, namely, that what the public contributes is a portion of pay for service rendered and the longer the service the greater the accumulation of contributions. It is argued by some that this should apply only up to the permissive age of retirement and that credit for years of service after that age would encourage some to continue who otherwise would retire. The weakness of this argument will be shown in the following illustration:—Mr. A is a teacher in a system designed to give half pay at age 62, if forty years of service have been rendered prior to that age; Mr. A has fulfilled these conditions and is receiving a salary of $1,600; if he retires at once he will receive an allowance of $800 the following year and each year thereafter. If he remains in service just one more year he will receive $1,600 pay for that year and a retirement allowance of $820 each year thereafter. It is obvious that the temptation to stay in is not so much the $20 increase in allowance to be secured thereby as it is the $800 additional active pay. The $800 additional, if saved and invested at 5 per cent would yield twice as much annually as would be his increased allowance.

REGULATIONS OF THE NINE STATES IN REGARD TO SERVICE

The provisions of the nine state systems in regard to service are shown in Table 12.

Table 12.—Comparison of the Regulations of the Nine States in Regard to Service [24]

	Conn.	Maine	Mass.	N. J.	N. Y.	Ohio	Penna.	Vt.	Wis.
1. Graduated according to length of service but subject to limitation indicated below	Ind.[1]	Ind.	Ind.	yes[2]	partly[3]	Ind.	yes	Ind.	Ind.[3]
2. All service in public schools of state to be credited	yes[4]	yes[5]	yes[22]	no[6]	no	no	no	yes	yes
3. All service up to permissive age **only** to be credited (see No. 9)	no[4]	no[5]	no	no	no	no	yes[7]	no	no
4. A limited number of years to count	30[9]	no[10]	30[22]	no	no	no	no	no	no
5. Maximum amount of all outside service to be credited	15	10	none	10	10	10	none	10	all[11]
6. Maximum amount of public school service of other states which may be credited	15	10	none	10	10[12]	10	none	10	all[11]
7. Maximum amount of private school service within the state which may be credited	none	none	none	none	none	none	none	none	all[11]
8. Maximum amount of private school service outside the state which may be credited	none	none	none	none	none	none	none	none	all[11]
9. If an employee leaves the service and later returns to service the credit for the service prior to the interval of absence is not forfeited unless the absence is for a longer period than the number of years here indicated	no[13] limit	no[14] limit	no limit	2[15]	2[15]	2[16]	5[17]	no limit	no limit
10. Do years of service enter into the determination of the amount of the annuity paid for by teacher?	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.
11. Do years of service enter into the determination of the amount of the annuity paid for by the state?	partly	Ind.	Ind.	yes	yes	yes	yes	Ind.	Ind.[18]
12. What is the minimum amount of service required in order to receive a superannuation benefit?	15	none[19]	5[21]	none	25	5	10	30	none
13. What number of years of service is regarded as a substitute for minimum permission age?	35[20]	none	none	35 to Present Entrants (only)	35	36	none	none	none
14. What number of years of service is regarded as the proper amount to produce a retirement allowance equal to one-half salary? See also table No. 39.	30	30	30	35	35	37½	40	30	30

[1] Ind.—indirectly—accumulations rather than years of service.
[2] a. State's share according to length of service. b. Teacher's share according to accumulation of contributions.
[3] Length of service enters into the calculation only through the larger sum which will have accumulated through longer service.
[4] None beyond the age of 70 and in any case no more than 30 except as shown in No. 13.
[5] Retirement allowance based entirely upon accumulated contributions of teachers and state.

Many of the differences among the service regulations of the several states are closely bound up with the Age Regulations shown in Table 6 and also the Salary Regulations shown in Table 29.

Length of Service. It will be noted that there is a great deal of uniformity among the states in that the retirement allowance is determined, more or less directly in accordance with the length of service rendered. There is a wide variation, however, in the practice of crediting public school service in each of the states. The variation is largely due to the emphasis placed in the regulations upon the question of continuity. Another factor which figures in the crediting of public school service within the State, is that of limiting the number of years to be counted. The method of accomplishing this appears to be in the direction of limiting the retirement allowance to a fixed maximum. All but two states, Massachusetts and Pennsylvania, allow credit for some service rendered in the public schools of other states. Connecticut allows 15 years, Maine, New Jersey, New York and Vermont allow a maximum of 10 years. In these five states the cost of this allow-

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[6] No "prior service" credit in excess of 35 years.
[7] Amended in 1925 allowing credit for all service.
[8] Partly—Within certain limits only.
[9] If the employing committee shall so request in writing the retirement board may permit the employment of such member beyond the age of 70 years.
[10] Retirement allowance based entirely upon cumulated contributions of teacher and state.
[11] It is provided that all teaching experience anywhere in the world shall be included in E of the following formula:
50 plus 5E—H=P: in which P equals the percentage of the teacher's deposit to be made by the state, E equals number of years of experience and H equals the number of full hundreds of salary above $1200.
[12] New entrants must pay up the cost of all service outside the state.
[13] However, accumulations on account of service prior to the absence must be made up and five consecutive years of service must precede retirement.
[14] Same as number 13 except 7 consecutive years, must precede retirement.
[15] And not more than 2 years absence in any five year period.
[16] The retirement board may grant a longer period of absence.
[17] If 20% of the teacher's share of contributions is left with the retirement board and if the teacher returns to service prior to the age of 59 there is no forfeiture to those who serve a total of 20 years.
[18] Same as No. 3 above.
[19] 30 years of service, 20 in Maine plus the attainment of age 60 or incapability of rendering satisfactory service.
[20] See note 1 under Table in regard to age.
[21] To count service rendered before July 1, 1914, total service before retirement must be at least 15 years, at least five of which must immediately precede retirement. With this exception a member 60 years of age or over may retire at any time.
[22] The limit of 30 years applies only in practice to the higher salaried teachers. Lower salaried teachers get the benefit of longer service when pensions are computed.
[23] See also Item 4 Table 12 and Table 39.
[24] This table is presented in the exact form in which it was sent to the Secretary of each of the Retirement Boards. The footnotes as well as the data in the table itself were checked and approved by each Secretary.

ance is made up entirely by the public—either state or local district appropriations. Wisconsin does not pay the cost of this outside service credit directly, but rather pays an increased rate for service after the teacher enters the Wisconsin system. The formula, which is used in determining the rate or amount paid by the state is shown in Note 11 of Table 12. Wisconsin makes this same rule apply to all outside service, that is, from private as well as public schools. No other state system makes any recognition for service in private schools.

Continuity of Service. A wide variation occurs in the regulations of the nine states in regard to forfeiture for absence from service. Vermont, Wisconsin and Massachusetts[1] do not cause credit to be forfeited because of absence from the system. Connecticut provides that there will be no forfeiture in cases where the teacher has been in service five years preceding the time of retirement. The Maine system is very similar to the Connecticut system, but requires seven years of continuous service immediately preceding retirement. New York, New Jersey and Ohio are very much more severe in case the continuity of service is broken. New Jersey and New York require that not more than two years of absence shall occur in any five year period or all service prior to such absence shall be forfeited. The Ohio provision is very much the same as those of New Jersey and New York except that the retirement board is authorized to grant a longer period of absence. The Pennsylvania law originally allowed three years of absence without forfeiture. In 1923, it was amended to allow five years of absence without forfeiture. In 1925, it was amended so that if 20 per cent of the teacher's share of contributions is left with the retirement board the teacher may be out of the system any length of time, but must return to service prior to age fifty-nine and must have rendered a total of twenty years in service in the public schools of Pennsylvania in order to retain the rights to service prior to the absence.

To determine actuarially the amount of annuity which is paid

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[1]See Note 21, Table 12.

for by the teachers' accumulations, the years of service are not taken into consideration in the accumulation at all, merely the amount of the accumulation as credited to the teacher is used. It, of course, follows that at any given salary the longer the period of service, the greater will be the accumulations. The length of service, therefore, indirectly affects the amount of annuity paid for by the teachers' share of the contributions. The nine states are uniform in so far as the teachers' annuity is concerned.

The state's share of the teachers' annuity is determined in exactly the same way as the teachers' annuity referred to in the preceding paragraph in only three states—Maine, Massachusetts, and Vermont. In these three states, the state provides an annuity exactly equal to that of the teacher. In Connecticut the provision is substantially the same, but is limited somewhat by the date of retirement. Those who retired prior to 1917 may in some cases receive slightly more than those who retired after that date. In the Wisconsin system the amount of annuity paid for by the state is exactly the annuity which the accumulations made by the state on behalf of the teacher will buy.

Minimum Amount of Service Required. The minimum amount of service in the nine states varies from zero to thirty years. Wisconsin states no minimum at all. Maine states no minimum but really ties it up with the idea of disability. Massachusetts, New Jersey and Ohio require a minimum of five[1] years; Pennsylvania requires ten years; Connecticut, fifteen years; New York twenty-five years, and Vermont thirty years. In New Jersey and New York thirty-five years of service is regarded as a substitute for a minimum permissive retirement age. Ohio provides that thirty-six years of service regardless of age will permit voluntary retirement. Maine, Massachusetts, Pennsylvania, Vermont, and Wisconsin allow no substitutes for the minimum age of retirement.

Number of Years of Service Regarded as the Proper Amount to Produce a Retirement Allowance Equal to One-Half of Salary. Here again there is a wide variation in the provision of the various

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[1]See Note 21, Table 12.

states. Connecticut, Maine, Massachusetts, Vermont, and Wisconsin have a plan which is devised to produce half salary at the end of thirty years of service. New Jersey and New York plans provide that thirty-five years of service should produce an allowance equal to one-half salary. In Ohio the number of years similarly required is thirty-seven and a half, while Pennsylvania requires forty.

THE PENNSYLVANIA SYSTEM IN REGARD TO SERVICE

In Pennsylvania the state does not match the individual teacher's contributions but contributes on a basis calculated by the actuary to be sufficient to purchase a pension equal to the annuity which the teacher's accumulations will buy at the time of retirement, i. e., at age 62. In making this calculation the Actuary carefully estimated that a large number would withdraw from the system and never return, others who withdrew would later return, and a considerable number would die before reaching the age of retirement. Even with all such allowances the cost, as originally estimated, was regarded by some as prohibitive and the framers of the law of 1917 evidently sought out ways of reducing the cost without injury or loss to those whom they considered most deserving. This appears to be a partial explanation for the following provisions of the law:

1. No retirement allowance to be granted for less than ten years of service.
2. No credit to be allowed for service anywhere except in the public schools of Pennsylvania.
3. No credit to be allowed to "New entrants" for service rendered after age 62.*
4. One-half credit to be allowed to "present employes" for service rendered after age 62 and before July 1, 1919, but none thereafter.*
5. Every year of service prior to July, 1919 to be allowed regardless of the number or extent of absences from service.
6. All credit for service prior to withdrawal to be forfeited in the case of a teacher who left the service after July 1, 1919 and returned after an absence of more than three years.†

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*Amended 1925. See Appendices I and II.

†Amended in 1923 and in 1925. See Appendices I and II.

Service in the Public Schools of Pennsylvania. In Table 13 is shown the distribution of the replies on the basis of years of service in the public schools of Pennsylvania. The median for teachers is 43.3 years as compared with 45.7 for the supervisory force and 22.6 for "other service;" the median for the grand total is 42.0. The low median for "other service" indicates the rather well-known fact that janitors, as a rule, do not enter

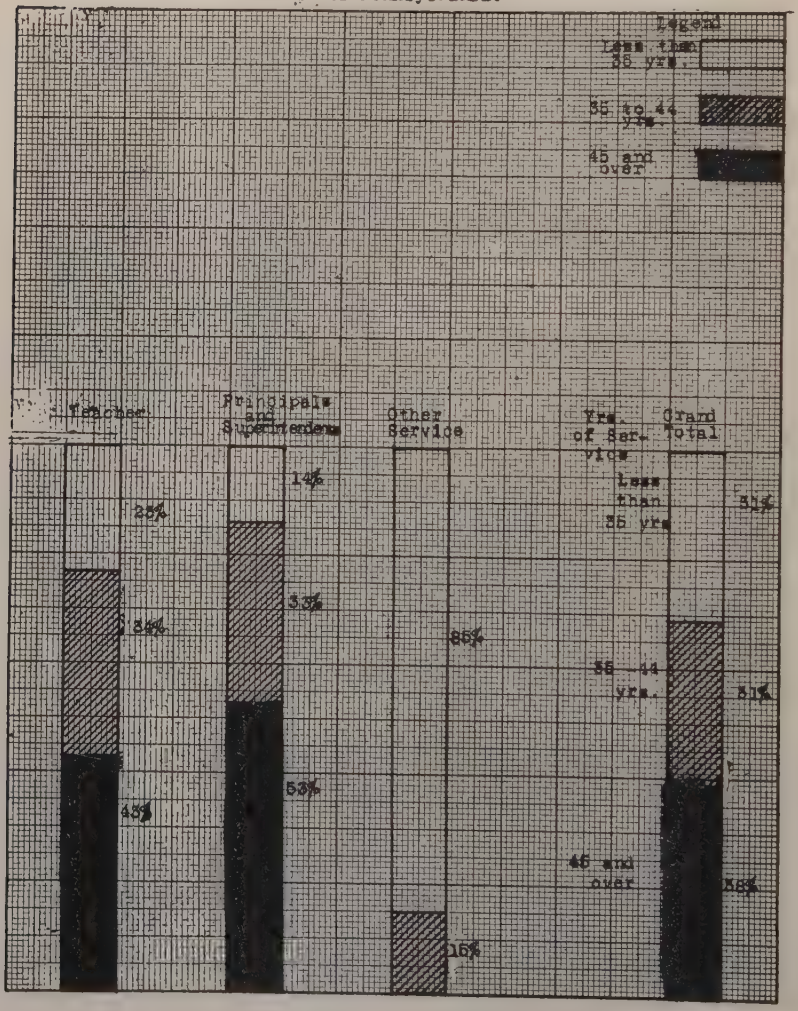
Table 13.—Distribution of Replies on the Basis of Years of Service in the Public Schools of Pennsylvania

YEARS OF SERVICE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
10-14	2	1	1	4	...	1	...	1	11	1	1	13	13	3	2	18
15-19	1	8	1	10	1	...	...	1	12	2	1	15	14	10	2	26
20-24	3	3	1	7	...	...	...	...	16	...	1	17	19	3	2	24
25-29	6	14	2	22	3	2	...	5	10	1	...	11	19	17	2	38
30-34	5	30	...	35	2	3	...	5	6	1	...	7	13	34	...	47
35-39	18	16	2	36	9	2	...	11	5	3	...	8	32	21	2	55
40-44	24	54	1	79	10	8	1	19	2	1	...	3	36	63	2	101
45-49	15	42	2	59	14	10	...	24	...	...	...	...	29	52	2	83
50-54	22	49	2	73	9	11	1	21	...	...	...	...	31	59	3	93
55-59	3	3	...	6	3	1	...	4	...	...	...	...	6	4	...	10
60-64	1	1	...	2	...	...	...	...	...	...	...	...	1	1	...	2
Total	100	221	12	333	51	38	2	91	62	9	3	74	213	268	17	498
No Answers	2	2	...	4	2	...	...	2	4	...	1	5	8	2	1	11
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				10–64				10–59				10–44				10–64
Median				43.3				45.7				22.6				42.0
First Quartile				35.7				39.9				16.8				32.0
Third Quartile				49.8				50.5				29.8				48.9
Quartile Deviation				7.0				5.3				6.5				8.4

the school system until rather late in life. The regulation which deprived all from receiving credit after age 62 was especially severe upon them. This short period of service credit caused them to receive a small allowance, one so small, in fact, that there has been a great deal of dissatisfaction among this class of employes. The quartile deviation is not great indicating that the variation around the median is not great.

Diagram 3 shows the relative distribution in each case. Only 14 per cent of the supervisory force had less than 35 years of service in Pennsylvania, whereas 23 per cent of the teachers and 85 per cent of "other service" had a similar amount. The per-

Diagram 3. Percentage Distribution of the Retired Employes According to Amount of Service Rendered in the Public Schools of Pennsylvania.



centage distribution of the grand total shows a fairly well balanced grouping: 31 per cent less than 35 years; 31 per cent between 35 and 44 years of service; and 38 per cent had 45 or more years of service in the public schools of Pennsylvania.

Outside Service. Table 14 shows that the service rendered by the retired employes in educational institutions within the state but not part of the public school system was comparatively small.

Table 14.—Distribution of Replies on the Basis of Years of Service in other Educational Institutions in Pennsylvania not part of Public School System

YEARS OF SERVICE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1- 2	3	7	1	11	6	2	...	8	...	...	...	...	9	9	1	19
3- 4	4	8	...	12	1	...	...	1	1	...	...	1	6	8	...	14
5- 6	1	1	...	2	1	1	...	2	...	...	...	...	2	2	...	4
7- 8	1	2	...	3	...	1	...	1	...	...	...	...	1	3	...	4
9-10	2	2	...	4	2	...	...	2	...	...	...	...	4	2	...	6
11-12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13-14	...	2	...	2	...	1	...	1	...	...	...	...	...	3	...	3
15-16	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
17-18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19-20	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1
Total	11	22	2	35	11	5	0	16	23	0	0	1	23	27	2	52
Range				1–20				1–16								1–20
Median				4.1				2.0								4.0
First Quartile				1.6				1.0								1.4
Third Quartile				7.8				8.0								8.0
Quartile Deviation				3.1				3.5								3.3

Only 52 of the 509, or approximately 10 per cent of the retired employes had experience of this character. The fact, however, that the range was from 1 to 20 indicates that in a few cases this service was a very important part of the total school service of those few. The smaller allowance which these people must necessarily receive is a very serious matter to them. One of them, who had served 16 years in the public schools and ten years in the private schools of Pennsylvania and ten years in the public schools of another state, writes the following: "My allowance is $11.50 per month, which barely pays room rent. A married nephew gives me my meals free and he is only a working man and has four children and a wife depending on him besides. No

one here will give old people employment and I have tried to find it."

Those who urge that credit be given for such service point out that in private schools such as Friends' Central, Penn Charter in Philadelphia, and others in various parts of the state, the taxpayer is actually relieved of the full burden of the cost of the education of the children concerned and that the State should at

Table 15.—Distribution of Replies on the Basis of Years of Service in Public Schools outside of Pennsylvania

YEARS OF SERVICE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
0- 2	2	8	1	11	6	3	...	9	...	...	...	...	8	11	1	20
3- 4	2	1	1	4	2	1	...	3	...	...	...	...	4	2	1	7
5- 6	2	5	1	8	2	...	...	2	...	...	...	...	4	5	1	10
7- 8	...	2	...	2	...	1	...	1	...	...	...	...	...	3	...	3
9-10	1	4	...	5	1	...	...	1	...	...	...	...	2	4	...	6
11-12	...	3	...	3	...	...	...	...	...	...	...	...	...	3	...	3
13-14	...	3	...	3	...	...	...	...	...	...	...	...	...	3	...	3
15-16	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
17-18	...	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2
19-20	...	1	...	1	...	1	...	1	...	...	...	...	...	2	...	2
21-22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23-24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	7	29	3	39	12	6	...	18	0	0	0	0	19	35	3	57
Range																1–20
Median																5.3
First Quartile																1.4
Third Quartile																9.9
Quartile Deviation																4.2

least make up the cost of that portion of the retirement allowance which would be represented by the number of years of private school service. They also urge that the Pennsylvania public school system received the benefits of the teachers' experience in these private schools. They further point out that a teacher at age 70 is no less unfit for service merely because he or she has spent 5, 10, or 20 years of his or her life in one of these private schools, and that it will not be possible for him or her to live on a lesser amount because of such service.

Service rendered in the public schools of other states is shown in Table 15. Only 57, or 11 per cent of the 509 who replied to the questionnaire had rendered such service. The median length of

this service rendered by the 57 was 5.3 years as compared with 4.0 years, the median shown in Table 14 for service in private schools in Pennsylvania. In this case the retired employes present the same reasons for credit as were given in connection with Table 14 except that they could not justly claim that Pennsylvania taxpayers were directly benefited by the service in other states because the children in those other state schools would not have

Table 16.—Distribution of Replies on the Basis of Years of Service in other Educational Institutions Outside of Pennsylvania (not part of Public School system)

YEARS OF SERVICE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1- 2	2	8	...	10	...	3	...	3	...	1	...	1	2	12	...	14
3- 4	...	3	...	3	1	...	...	1	...	...	...	...	1	3	...	4
5- 6	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
7- 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9-10	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
11-12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13-14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15-16 and over	...	...	1	1	...	...	...	...	...	...	...	...	...	...	1	1
Total	4	11	1	16	2	3	0	5	0	1	0	1	6	15	1	22
Range																1-16
Median																1.6
First Quartile																.8
Third Quartile																4.2
Quartile Deviation																1.7

presented themselves for free instruction in the schools of Pennsylvania. One of these employes who retired at age 63 with an allowance of $184 per year wrote the following: "My father lost his hearing and I had to support father, mother and sister. Now I have to care for a sister who is in poor health." This teacher had taught twenty-six years in Pennsylvania and twelve in another state. She indicated that her minimum needs would be satisfied if she could have $300. In Connecticut she would have received $350, as will be seen in Table 12, because of the minimum provision. As was shown in Table 12, it is common practice in other states to allow credit up to a maximum of ten years for such outside service.

Table 16 shows the amount of service rendered by retired employes in private educational institutions outside of Pennsyl-

vania. The median is 1.6 years for the employes who have had such service and the number affected is only 22. This group may advance the same reasons as were given above under Table 15 for receiving credit. No state, however, now recognizes such service as was shown in Table 12.

Table 17 was obtained by combining Tables 13, 14, 15 and 16 in the following manner: the median in each case was multiplied by the number of employes affected; these products were added together and the ratio of each product to the total was determined in the per cent. The results showed that about 2.5 per cent of the total school service of the retired employes was rendered outside

Table 17.—Combination of tables 13, 14, 15 and 16 to show proportionate parts of the grand total of all school service rendered by the 509 who replied to the Questionnaire

Table Nos.	A Total No. of Employes	B Median No. Years of service	Product of A x B. Total Employe—Years	Percent of all service rendered
13	498	42.0	20916.0	97.46
14	52	4.0	208.0	.97
15	57	5.3	302.1	1.41
16	22	1.6	35.2	.16
17	498	43.1	21461.3	100.00

the public schools of Pennsylvania, and therefore that the amount of such service is relatively small. The comments of one author already frequently referred to is interesting on this point:

> Studensky writes: "It is frequently regarded as necessary to credit them (the teachers)....with at least a part of the service rendered outside of the system. In doing this, however, a portion of the pension is paid by the retiring authority for services from which it has benefited only indirectly."

The report submitted by the National Education Association in 1924,[1] laid special emphasis upon the importance of guaranteeing to teachers in service all the benefits which they had a reasonable right to expect under a former retirement system. The Carnegie Foundation in some of its reports[2] indicates a similar attitude. In the Philadelphia system which was in operation from 1907

[1]Committee on Retirement Allowances, National Education Association Report, 1924.

[2]Carnegie Foundation, Seventeenth Annual Report, 1922, page 127.

to 1919, credit was given to all members for service rendered outside of Philadelphia Public Schools up to a maximum of ten accredited years. This outside service was credited regardless of whether it was public or private, in or outside of Pennsylvania. The members of the Philadelphia system who thus received credit have felt that a great injustice was done to them when this was wiped out by the merging of the Philadelphia system with the State system.

The Carnegie Foundation as well as the National Education Association has pointed out that while there was, perhaps, no legal obligation on the part of the State to recognize the obligations assumed by local retirement systems, yet there was a very definite moral obligation.

In some other states, Ohio for example, the full obligation of local retirement systems was taken over by the state even though the benefits provided by the local systems were much greater than those provided by the new state system. Evidence was not available as to whether outside credit was thus recognized in Ohio for private schools. The fact that the obligations of local systems in general were taken over indicates the recognition of the moral type of obligation referred to.

Another argument advanced by those who favor outside credit of any sort is the fact that by allowing such credit, good teachers in either public or private systems will be encouraged to enter the system which allows the credit.

In opposition to this latter argument and to most of the other arguments advanced in favor of such credit the following argument is frequently presented: Where such credit is given without limit, there is great danger of the retirement system being burdened exceedingly for service from which it received no benefit. Opposition is also frequently advanced on the ground that credit for private school service would be a step backward in the direction of the old union of church and state.

It is difficult to devise a scheme which will effectively eliminate the unfit and also attract desirable teachers from other systems without giving some consideration to this question of outside

service. It is likewise difficult to find a ground upon which to justify a demand upon Pennsylvania to pay the cost of such service credit. The Pennsylvania system recognizes and allows for all "present employes" credit for all service rendered in the public schools of Pennsylvania despite the fact that no contribution to the cost was made prior to 1919 by state, teacher, or local board, and no provision had been made prior to 1917 that such service would be so credited. Under such circumstances there is not so much difference between the service outside the public school system of the state and the service within it for the period prior to 1919.

When the following facts are considered: first, that there is some moral obligation on the part of the public to the members of the Philadelphia and other local funds, and second, that the cost to the state is relatively small, and third, that the financial need to the few concerned is great, there seems to be good reason why such service should be included along with other prior service.

In so far as "New Entrants" are concerned the situation is very different and recognition for outside service should be made by allowing the "New Entrant" to make up the total cost. A still better solution would probably be obtained by the adoption of some modification of the Wisconsin or Vermont plans by all systems. See Table 12 and pages ff.

Continuity of Service. In the early history of the retirement allowance movement a great deal of stress was placed upon the idea of continuity of service in connection with the determination of eligibility to receive retirement allowance. The development of the "deferred pay" concept of what a pension is, has caused the emphasis upon continuity to wane. Some systems as indicated in Table 12 require five years of service immediately preceding retirement as one of the conditions of eligibility. As has been stated before, the Carnegie Foundation, the National Education Association Committee and other students of the problem point out that the portion of pay contributed by the public and set aside in the retirement fund for the benefit of the employe should belong to him or his estate just as truly as any other portion of his

pay. Only three of the nine states, Maine, Vermont and Wisconsin, have recognized this in their laws. The other six states, as indicated in Table 12 have some procedure whereby absence from the system may cause credit to be forfeited. The injustice of this policy will be apparent from the following illustration in Pennsylvania prior to the amendments of 1925. A certain teacher having taught 31 years was compelled to separate from the service to care for an aged mother. Seven years later, after the death of the mother, this teacher returned to service. As she had been out of the system more than five years, it was impossible under the law for her to receive any credit for her service prior to her separation; as she was then 61 years of age she could not serve ten years prior to the age of compulsory retirement and therefore could not fulfill the minimum service requirement. Thus, these forfeiture provisions prevented her from receiving any retirement allowance, despite the fact that she had rendered forty years of service to the public schools of Pennsylvania. This situation was partially remedied by one of the amendments of 1925. (See Appendices I and II.)

Of the 478 employes who answered the question, 177 indicated that their service in Pennsylvania had not been continuous. (See Table 18.) Of these, 163 indicated the number of years covered by their absence. (See Table 19.) The median of 5.0 years indicates that almost 50 per cent of those whose period of service had been broken up had been out of the system longer than five

Table 18.—Distribution of Replies on the Basis of Continuity of Service in the Pennsylvania Public School System

SERVICE CONTINUOUS	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
Yes	50	122	8	180	27	25	1	53	58	7	3	68	135	154	12	301
No	45	86	3	134	23	11	1	35	7	...	1	8	75	97	5	177
Total	95	208	11	314	50	36	2	88	65	7	4	76	210	251	17	478
No Answers	7	17	1	23	3	2	...	5	1	2	...	3	11	19	1	31
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509

years. Stating it in another way, 81 of the 478, or 17 per cent of the retired employes had forfeited some of their credit because of the five year limit in the law. The amendments of 1925 have, to a large extent, remedied this difficulty for employes who serve more than 20 years and who become members of the retirement system prior to July 1, 1926.

Table 19.—Distribution of Replies on the Basis of Length of the break in the continuity of Pennsylvania Public School Service

LENGTH OF BREAK IN SERVICE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1- 2	9	20	1	30	6	5	1	12	2	1	...	3	17	26	2	45
3- 4	7	18	...	25	8	1	...	9	3	...	...	3	18	19	...	37
5- 6	5	8	...	13	6	3	...	9	...	...	...	...	11	11	...	22
7- 8	4	11	...	15	2	1	...	3	...	...	...	...	6	12	...	18
9-10	2	5	...	7	2	1	...	3	...	...	...	...	4	8	...	12
11-12	3	5	...	8	...	...	...	...	...	...	...	...	3	5	...	8
13-14	1	2	...	3	...	...	...	...	...	...	...	...	1	2	...	3
15-16	1	4	...	5	...	...	...	...	...	...	...	...	1	4	...	5
17-18	2	1	...	3	...	...	...	...	...	...	...	...	2	1	...	3
19-20	...	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2
21-22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23-24	1	1	...	2	...	...	...	...	...	...	...	...	1	1	...	2
25-26	1	1	2	4	...	...	...	...	...	...	...	...	1	1	2	4
27 and over	1	1	...	2	...	1	...	1	...	...	...	...	1	1	...	2
Total	37	79	3	119	24	12	1	37	5	1	...	6	66	93	4	163
Range				1–33				1–28				1–4				1–33
Median																5.0
First Quartile																1.8
Third Quartile																9.0
Quartile Deviation																3.6

Credit beyond Age 62. Section 5614 of the law provides for a state annuity based upon the number of years of service rendered prior to 1919 regardless of age; and a further state annuity based upon the number of years of service prior to age 62. (See page 21.) The first part of the provisions was designed to make up the portion of the cost of the Retirement Allowance which the employe would have paid if the system had been in existence throughout the entire period of service of the employe. The second part of the provision was designed to make good the cost of that portion of the Retirement Allowance which normally would be paid for by the state. In drafting the general plan, it was

assumed that all might retire at age 62 and therefore no provision was made for accrediting service rendered after age 62 for the years following 1919. Employes retiring after age 62 regularly complained of being deprived of credit for rendering service after that age. These complaints together with the fact that the inequitability between the two state annuities described above became more and more apparent, helped greatly to bring about

Table 20.—Distribution of Replies on the Basis of Years of Service Accredited in determining State Annuity

YEARS OF SERVICE ACCREDITED	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
10-14	4	...	1	5	...	2	...	2	10	2	1	13	14	4	2	20
15-19	1	6	2	9	1	...	...	1	11	...	1	12	13	6	3	22
20-24	3	9	...	12	1	...	...	1	11	...	1	12	15	9	1	25
25-29	4	14	2	20	...	2	...	2	8	2	...	10	12	18	2	32
30-34	5	24	...	29	1	1	...	22	5	...	...	5	11	25	...	36
35-39	22	23	...	45	10	3	...	13	4	2	...	6	36	26	...	64
40-44	23	47	2	72	10	8	2	20	1	1	...	2	34	56	4	94
45-49	6	21	2	29	8	6	...	14	...	...	...	...	14	27	2	43
50-54	9	18	...	27	3	2	...	5	...	...	...	...	12	20	...	32
55-59	...	3	...	3	3	...	...	3	...	...	...	...	3	3	...	6
60 and over	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	77	165	9	251	37	24	2	63	50	7	3	60	164	196	14	374
No Answers	25	58	3	86	16	14	...	30	16	2	1	19	57	74	4	135
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				10–59				10–59				10–44				10–59
Median				40.4				42.1				22.1				39.4
First Quartile				32.9				38.0				15.8				29.1
Third Quartile				44.7				46.8				29.0				44.3
Quartile Deviation				5.8				4.4				7.4				7.9

the passage of another of the 1925 amendments to the effect that credit for service after age 62 will hereafter be allowed. (See Appendix I.)

The gross effect of the forfeiture due to lack of continuity, together with this lack of credit after age 62, is shown in Table 20. According to the replies the median number of years of service credited was 39.4 as compared with the median of 42.0 for the years of service actually rendered. (See Table 13.) Corresponding comparisons may be made by the reader for any of the groups by further comparison with Table 13.

In Table 21 is shown the distribution of the retired employes according to the way they answered question No. 2g of the questionnaire. It will be noted that 12 of the 337, who have been classified as teachers in all other tables here indicate some other

Table 21.—Distribution of Replies on the Basis of Position at the time of Retirement

POSITION HELD	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
Teachers	94	206	11	311	1	2	...	3	...	...	...	...	95	208	11	314
Teaching Principals	2	3	...	5	7	8	...	15	...	...	...	...	9	11	...	20
Principal	1	3	...	4	31	18	2	51	...	...	...	...	32	21	2	55
Supervisor or Director	...	...	...	...	4	9	...	13	...	...	...	...	4	9	...	13
Superintendent or Asst. Supt	1	...	...	1	7	...	...	7	...	...	...	...	8	...	...	8
Clerical Assistants	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
Janitors, Carpenters, Firemen	...	...	...	...	...	...	...	...	58	7	3	68	58	7	3	68
Attendance Officers	...	1	...	1	...	...	...	...	4	...	1	5	4	1	1	6
Board Secretary	...	...	...	...	...	...	...	...	2	...	...	2	2	...	...	2
Dean of Women—State Normal School	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Secretary of High School	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Dean of Girls' High School	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Matron, House Mother	...	...	...	...	...	...	...	...	2	...	...	2	...	2	...	2
Nurse	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
Engineer	...	...	...	...	...	...	...	...	2	...	...	2	2	...	...	2
Total	98	216	11	325	50	37	2	89	66	9	4	79	214	262	17	493
No Answers	4	7	1	12	3	1	...	4	...	...	...	0	7	8	1	16
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509

position at the time of retirement. This is explained by the fact that in answering question 2a they indicated that all or very nearly all of their service was rendered as a teacher. It will be noted, also, that 68 of the 79 classified as "other service" indicated in answering this question that they were janitors or carpenters or firemen.

SUMMARY—CHAPTER II

The facts brought out by an examination of the law and the replies to the questionnaire show the following:

1. Forty years of service are required in order to be eligible for a retirement allowance of one-half salary. (Appendix I, page 138 and Table 12.)
2. No provision is made for "outside credit" of any sort. (Appendix I and Tables 14, 15, 16.)
3. Serious forfeiture may result in cases of extended absence. (Appendix I, page 135 and Table 19.)
4. No allowance is granted for credit beyond the age of 62. (Appendix I, page 138 and Table 20.)

No other state system except Pennsylvania requires 40 years of service to be eligible for a retirement allowance of one-half salary. (Table 12.)

Certain provisions are made in seven of these nine states for crediting service rendered in the public schools of other states. (Table 12.)

In three of the states the forfeiture provisions for absence from service are more severe than they are in Pennsylvania, but on the other hand, three states, Massachusetts, Wisconsin and Vermont, provide for no such forfeiture. (Table 12.)

No state except Pennsylvania indicated that credit for service was not allowed beyond the age of 62. (Table 12.)

The Carnegie Foundation recommends that service should enter into the determination of retirement allowance only through the larger accumulations which result from a larger number of contributions and a larger period of interest collection. By this method no question arises about forfeiture due to absence, or credit for service beyond the age of 62.

CHAPTER III

SALARY

IN the Introduction to Part I it was pointed out that early retirement allowances were not related to salary. In the past ten years practically all systems have used the salary schedule, directly or indirectly, to determine the amount of retirement allowance. A pension of five hundred dollars per year was a moderately large amount from the point of view of the low-paid employe, whereas to the higher salaried group it was so small that it lost much of the effect for which it was intended. It is perfectly natural that an employe upon retirement should desire to continue to live on approximately the same scale as he has lived preceding retirement. This standard of living in the individual case is largely controlled by the salary received preceding retirement. It is obvious, therefore, that the retirement allowance should bear a fair relation to the salary at the time of retirement in order to prove itself satisfactory to the employe. It is generally assumed that the higher paid employe should not need a proportionately large retirement allowance because of the fact of having received the larger pay. Statistics[1], however, which are available on this point indicate the fact that almost all higher salaried employes live up to their incomes and when the time of retirement comes they are relatively no better prepared in the way of savings than the lower paid employes. While this fact has an influence on the proper solution of the question it does not altogether counteract the feeling on the part of the low paid employes that the higher paid should, and could, have saved, even if they did not. There is doubtless an opportunity for a study of this question as to what sort of a plan would really be most effective in accomplishing good for the public schools. This study is confined to an observation of existing facts and the evaluation of them in the light of generally accepted public opinion, as indicated in the reports of the National Education Association Committee; the Carnegie Foundation and other special studies in this field.

[1]Carnegie Foundation, Nineteenth Annual Report, 1924, pages 18-23.

METHODS OF RELATING ALLOWANCE TO SALARY

Two general methods of relating retirement allowance to salary are now in operation. The one, called the Indirect Method, accomplishes its result by having a fixed rate of deduction made throughout the entire period of service. When retirement occurs under this plan the retirement allowance is determined entirely upon the basis of the accumulated money and the age of the employe at retirement. The other, the Direct Method, establishes a fixed rate of deduction throughout the period of active service, but determines the retirement allowance on the basis of the salary in the last few years of service (five or ten) preceding retirement. The critics* of the direct method point out the impossibility of forecasting thirty or forty years hence what the salaries will be and therefore what rate should be deducted during the period of active service in order to have the necessary reserves built up with which to pay the promised retirement allowance. Those who defend the plan reply that periodic actuarial revaluations of the various funds with such revision of rates as may be necessary will fully protect the soundness of the fund and incidentally accomplish the result of making the retirement allowance bear a closer relation to the final salary and therefore to the standards of living of the employe immediately preceding retirement.

The effect of the Indirect Method of building up the reserve takes into consideration salaries which were paid a great many years preceding the time of retirement and therefore, as a rule in America, includes salaries a great deal lower than our standard at the time of retirement.

The ultimate effect of this is to produce a retirement allowance much less than one-half of the standard salary in cases where the rate at the outset was established with the idea of providing half salary. To illustrate—As was shown in the study made by King[1], the salaries of a vast majority of Pennsylvania teachers

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*Carnegie Foundation, Seventeenth Annual Report, 1922, page 127ff.
Carnegie Foundation, Nineteenth Annual Report, 1924, page 151ff.

[1]King, L. A. Status of the Rural Teacher in Pennsylvania. Department of the Interior, Bur. of Ed. Bull., 1921, No. 34,

were in the neighborhood of four hundred dollars, even as recently as 1920. Very little salary change occurred for many years preceding this, and therefore for these teachers who had contributed at a rate estimated to produce half salary at the time of retirement, each would have in 1921 accumulated a sum which would provide a retirement allowance of approximately $200. The increased cost of living was a large factor in bringing about increased salaries and assuming that these teachers will retire on that basis, they find their successors in the position receiving salaries approximating $800 per year. The retirement allowance of $200 designed to be adequately related to salaries of $400 would be hopelessly inadequate if related to the salaries of $800.

METHODS USED BY PENNSYLVANIA SYSTEM

Both plans are included in the Pennsylvania system. The employe contributes throughout the entire period of service, and at retirement purchases an annuity referred to as the employe's annuity, an amount which the accumulated sum will buy at the attained age of the employe. The state annuity, which when added to the employe's annuity makes up the retirement allowance, is determined according to the direct method. By it a rate determined by the actuary to be sufficient is used to accumulate the sums necessary to provide an annuity determined upon the basis of 1/160th of the teacher's "final salary"[1] for each year of service rendered.

SALARIES IN PENNSYLVANIA

The salaries of public school employes have long been low in Pennsylvania. Table 22 shows the monthly salary for the first year of service of Pennsylvania Retired Employes. Of the 509, 481 answered this question and the median amount, it will be noticed, was $31.70 for teachers; $33.80 for the supervisory force; $46.30 for janitors; and $33.30 for all of these groups combined. In this group again we find the illustration of the fact that janitors come into the system late in life. Of course, janitors are not found in the smaller districts, and the comparison, considering the state as a whole, must be carefully made.

[1]Appendix 1, page 124.

Table 22.—Distribution of Replies on the Basis of SALARY PER MONTH the FIRST YEAR OF SERVICE in the Pennsylvania Public Schools

SALARY PER MONTH	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0-	...	3	...	3	...	...	...	...	...	...	...	...	...	3	...	3
10- 19	3	20	...	23	4	2	1	7	3	2	...	5	10	24	1	35
20- 29	39	65	5	109	17	9	...	26	3	5	1	9	59	79	6	144
30- 39	41	84	4	129	19	14	1	34	14	1	1	16	74	99	6	179
40- 49	3	28	...	31	7	8	...	15	12	...	...	12	22	36	...	58
50- 59	1	...	...	1	1	2	...	3	1	...	...	1	16	2	...	18
60- 69	2	2	1	5	2	1	...	3	6	...	...	6	10	3	1	14
70- 79	2	1	...	3	...	...	...	...	6	...	1	7	8	1	1	10
80- 89	1	3	1	5	1	...	...	1	3	...	...	3	5	3	1	9
90- 99	...	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2
100-109	1	1	...	2	...	1	...	1	1	...	...	1	2	2	...	4
110-119	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
120-129	1	...	...	1	...	...	...	...	1	...	...	1	2	...	...	2
130-139	...	...	...	...	1	...	...	1	1	...	...	1	2	...	...	2
140-149	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
150 and over	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
Total	94	209	11	314	53	37	2	92	64	8	3	75	211	254	16	481
No Answers	8	14	1	23	...	1	...	1	2	1	1	4	10	16	2	28
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				6–120				12–166				10–130				6–166
Median				31.7				33.8				46.3				33.3
First Quartile				24.8				26.2				33.0				25.7
Third Quartile				37.8				41.3				60.4				40.0
Quartile Deviation				6.5				7.6				13.7				7.1

Table 23.—Distribution of Replies on the Basis of MONTHS in FIRST YEAR OF SERVICE in Pennsylvania

MONTHS PER YEAR	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
2.01– 3	2	3	...	5	4	1	...	5	...	...	...	...	6	4	...	10
3.01– 4	10	10	...	20	4	...	...	4	...	...	...	...	14	10	...	24
4.01– 5	46	24	1	71	17	1	...	18	1	...	...	1	64	25	1	90
5.01– 6	21	35	1	57	11	7	...	18	...	...	...	...	32	42	1	75
6.01– 7	3	22	1	26	4	2	...	6	1	...	...	1	8	24	1	33
7.01– 8	4	25	2	31	2	2	...	4	2	...	...	2	8	27	2	37
8.01– 9	2	20	...	22	5	5	1	11	7	2	1	10	14	27	2	43
9.01–10	6	64	5	75	2	15	1	18	2	...	1	3	10	79	7	96
10.01–11	...	2	...	2	...	...	...	...	...	1	...	1	...	3	...	3
11.01–12	1	10	...	11	4	5	...	9	49	5	1	55	54	20	1	75
Total	95	215	10	320	53	38	2	93	62	8	3	73	210	261	15	486
No Answers	7	8	2	17	0	0	0	0	4	1	1	6	11	9	3	23
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				3–12				3–12				3–12				3–12
Median				6.3				6.2				11.3				7.3
First Quartile				4.8				4.8				11.0				5.0
Third Quartile				9.1				9.2				11.7				9.5
Quartile Deviation				2.2				2.2				3				2.2

Table 23 shows the distribution of the retired employes according to the number of months in the first year of service rendered in Pennsylvania. In all, 486 of the 509 answered this question. The median number of months indicated was seven for teachers; seven for the supervisory force; twelve for "other service" and eight for all combined. These figures show that the school term was formerly much shorter than it is now.

Table 24.—Distribution of Replies on the Basis of SALARY PER MONTH the LAST YEAR OF SERVICE Preceding Retirement

SALARY PER MONTH	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0– 19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20– 39	...	...	...	...	...	1	...	1	...	2	1	3	...	3	1	4
40– 59	1	7	...	8	...	...	...	...	5	3	1	9	6	10	1	17
60– 79	8	17	...	25	2	...	...	2	10	1	...	11	20	18	...	38
80– 99	20	46	2	68	3	4	...	7	10	1	1	12	33	51	3	87
100–119	47	47	2	96	7	4	...	11	14	...	...	14	68	51	2	121
120–139	7	23	2	32	6	3	...	9	10	1	1	12	23	27	3	53
140–159	2	29	1	32	4	2	2	8	7	...	...	7	13	31	3	47
160–179	4	9	2	15	4	6	...	10	1	...	...	1	9	15	2	26
180–199	1	10	...	11	6	4	...	10	1	...	...	1	8	14	...	22
200–219	1	24	1	26	4	1	...	5	1	...	...	1	6	25	1	32
220–239	1	1	...	2	1	...	...	1	...	...	...	...	2	1	...	3
240–259	2	1	...	3	2	2	...	4	...	...	...	...	4	3	...	7
260–279	...	...	...	...	1	...	...	1	1	...	...	1	2	...	...	2
280–299	...	...	...	...	5	1	...	6	...	...	...	...	5	1	...	6
300–319	1	1	...	2	2	2	...	4	1	...	...	1	4	3	...	7
320–339	2	...	...	2	2	...	...	2	...	...	...	...	4	...	...	4
340–359	...	...	...	...	2	5	...	7	...	...	...	...	2	5	...	7
360 and over	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
Total	98	215	10	323	52	35	2	89	61	8	4	73	211	258	16	485
No Answers	4	8	2	14	1	3	...	4	5	1	...	6	10	12	2	24
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range	42–374				38–383				25–300				25–383			
Median	112.60				173.00				102.14				115.95			
First Quartile	94.04				122.78				71.36				94.31			
Third Quartile	148.28				253.75				129.58				158.62			
Quartile Deviation	27.12				65.48				29.11				32.16			

The bearing which Tables 22 and 23 have upon this study is the fact that they show the small amount of income which the employes had in the early part of their service and therefore the impossibility of creating larger savings. This same fact is illustrated in Tables 24 and 25 which show, respectively, the monthly salary the last year of service in Pennsylvania and the

number of months per year. It will be noted that 485 of the 509 answered this question. The median amount for teachers is $112.60 per month; for the supervisory force $173.00; for "other service" $102.14; and $115.95 for all on the retired list. Such salaries cannot be regarded as providing much room for savings.

Table 25.—Distribution of Replies on the Basis of MONTHS in LAST YEAR OF SERVICE in Pennsylvania

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
6	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
7	18	15	1	34	2	...	...	2	...	...	...	...	20	15	1	36
8	43	30	1	74	12	2	...	4	1	...	...	1	56	32	1	89
9	16	75	3	94	15	12	...	27	4	1	1	6	35	88	4	127
10	16	95	3	114	13	23	2	38	1	3	...	4	30	121	5	156
11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	2	1	...	3	10	...	...	10	54	4	2	60	66	5	2	73
Total	96	216	8	320	52	37	2	91	60	8	3	71	208	261	13	482
No Answers	6	7	4	17	1	1	...	2	6	1	1	8	13	9	5	27
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				6–12				7–12				8–12				6–12
Median				9				10				12				9
First Quartile				8				9				12				8
Third Quartile				10				10				12				10
Quartile Deviation				1.0				0.5				0.0				1.0

The increased length of school term is shown in Table 25 by the median of 9 for the teachers; 10 for the supervisory force; 12 for "other service" and 9 for the grand total.

AVERAGE SALARY DURING LATTER PART OF SERVICE

Tables 26 and 27 show how the increase in salary following 1919 affects the determination of the "final salary" which is used in calculating the retirement allowance. Table 26 indicated the average salary for the last five years preceding retirement. Table 27 shows the average salary for the ten years preceding retirement.

The median on Table 26 for the grand total is $868 as compared with $759 for the corresponding median on Table 27. Other similar comparisons may be made between these two tables as desired by the reader.

In Diagram 4 is found a graphic representation of the percentage distribution of the retired employes according to the average salary received during the last ten years of service. It will be noted that in the teacher group the average salaries were considerably higher for women than for men. The salaries of super-

Table 26.—AVERAGE SALARY of the Retired Employes for the LAST FIVE YEARS OF SERVICE Preceding Retirement, as shown by the Replies to the Questionnaire

AVERAGE SALARY FOR LAST FIVE YEARS	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0– 199	...	...	...	...	...	...	...	...	2	...	...	2	2	...	...	2
200– 399	5	11	...	16	2	1	...	3	1	1	1	3	8	13	1	22
400– 599	22	40	1	63	5	...	...	5	4	3	...	7	31	43	1	75
600– 799	31	43	2	76	5	5	...	10	9	...	...	9	45	48	2	95
800– 999	15	27	1	43	4	6	...	10	10	...	...	10	29	33	1	63
1000–1199	6	22	1	29	5	4	...	9	10	...	1	11	21	26	2	49
1200–1399	...	21	...	21	4	3	1	8	6	...	...	6	10	24	1	35
1400–1599	3	10	1	14	2	2	1	5	4	1	...	5	9	13	2	24
1600–1799	...	10	...	10	1	1	...	2	3	...	...	3	4	11	...	15
1800–1999	5	6	...	11	3	...	...	3	2	...	...	2	10	6	...	16
2000–2199	1	1	...	2	4	...	...	4	1	...	...	1	6	1	...	7
2200–2399	1	1	...	2	3	1	...	4	1	...	...	1	5	2	...	7
2400–2599	...	1	...	1	2	4	...	6	1	...	...	1	3	5	...	8
2600–2799	1	...	...	1	1	2	...	3	...	...	...	...	2	2	...	4
2800–2999	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
3000–3199	...	...	...	...	3	...	...	3	1	...	...	1	4	...	...	4
3200–3399	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3400–3599	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
3600–3799	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
3800–3999	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4000–4199	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4200–4399	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4400–4599	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
Total	92	193	6	291	47	29	2	78	55	5	2	62	194	227	10	431
No Report	10	30	6	46	6	9	...	15	11	4	2	17	27	43	8	78
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range	$300–3500				320–4500				182–3036				182–4500			
Medians	775				1250				1000				868			
First Quartile	580				830				678				618			
Third Quartile	1140				2175				1350				1299			
Quartile Deviation	280				673				336				340			

intendents and principals were almost the same for men and women. It is very interesting to observe that the salaries for "other service" are considerably higher than that for teachers, 60 per cent of the grand total of "other service" receiving salaries of $800 and over, whereas only 36 per cent of the teachers are found in that group. Seventy per cent of the average salaries for principals and superintendents were above $800; 45 per cent

Diagram 4. — Percentage Distribution of Retired Employes on the Basis of Average Salary for the Last Ten Years preceding Retirement, as shown by the Replies to the Questionnaire.

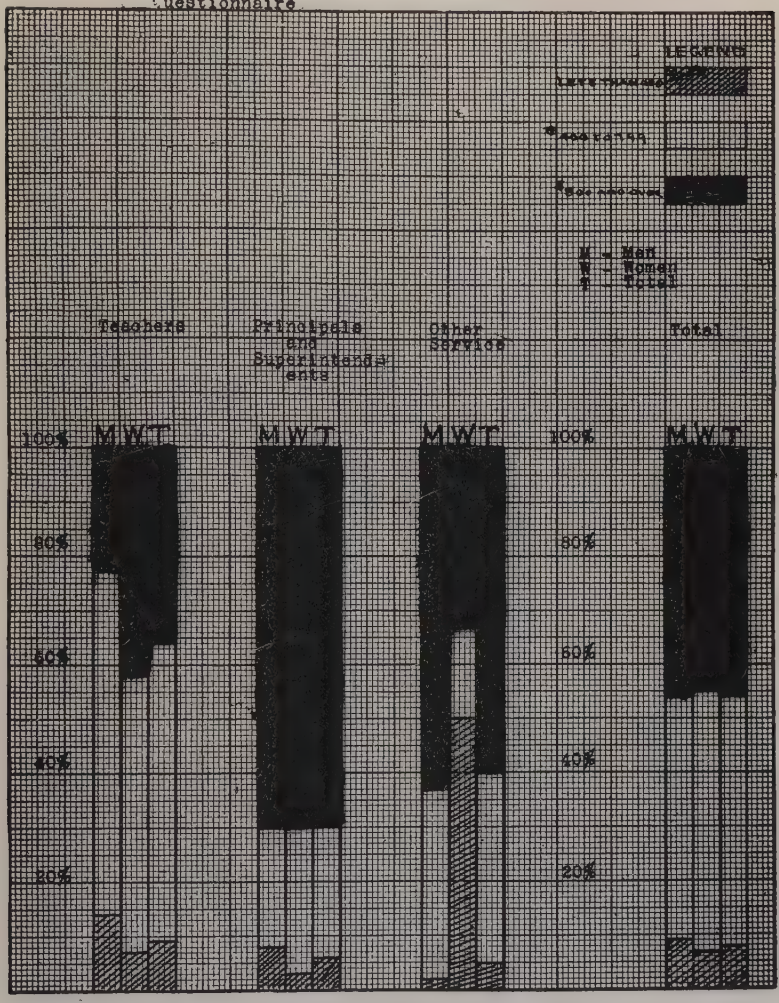

Table 27.—Distribution of Replies on the Basis of AVERAGE ANNUAL SALARIES for the LAST TEN YEARS OF SERVICE

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0– 199	1			1									1			1
200– 399	12	14		26	4	1		5	1	1	1	3	17	16	1	34
400– 599	42	54	1	97	5	2		7	5	2		7	52	58	1	111
600– 799	18	45	3	66	6	6		12	14	1	1	16	38	52	4	94
800– 999	5	33	1	39	7	7		14	14		1	15	26	40	2	68
1000–1199	3	18		21	1	5	2	8	7	1	1	9	11	24	3	38
1200–1399	1	17	1	19	6	2		8		1		6	12	20	1	33
1400–1599	1	8	1	10	4			4	3			3	8	8	1	17
1600–1799	3	3		6	2	1		3	2			2	7	4		11
1800–1999	4	1		5	5	1		6	1			1	10	2		12
2000–2199	1			1	3			3	1			1	5			5
2200–2399		1		1		3		3	1			1	1	4		5
2400–2599	1			1	4			4					5			5
2600–2799						1		1	1			1	1	1		2
2800–2999					1			1					1			1
3000–3199						1		1						1		1
3200–3399																
3400–3599	1			1	1			1					2			2
3600–3799	1			1									1			1
3800–3999					1			1					1			1
4000 and over																
Total	94	194	7	295	50	30	2	82	55	6	4	65	199	230	13	442
No Report	8	29	5	42	3	8		11	11	3		14	22	40	5	67
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range	$132–3750				205–3800				307–2700				132–3800			
Median	671				1075				887				759			
First Quartile	496				742				666				536			
Third Quartile	960				1817				1172				1123			
Quartile Deviation	232				537				253				294			

of the total number of retired employes received an average salary of over $800 for the last ten years of service, whereas 8 per cent received less than $400.

In Table 28 is found the relationship of the average salary the last ten years of service to the retirement allowance. Considering the fact that this average salary is used in calculating the state's share of the retirement allowance it is not surprising to find that the value of r is .61 P.E.= ± .017.[1] In fact it might reasonably be expected to be higher.

The effect of using the "average for the last ten years" in calcu-

[1]Rugg, H. O. Statistical Methods Applied to Education. Houghton Mifflin Co. Chapter IX. (A value of r of .60 or above is regarded as very high.)

Table 28.—Relation of Average Salary the Last Ten Years of Service—to Retirement Allowance

Retirement Allowance	$0–399	400–799	800–1199	1200–1599	1600–1999	2000–2399	2400–2799	2800–3199	3200–3599	3600–3999	4000–over	Total
$1000–Over	3	.....	.....	.....	1	4	2	.....	2	2	.....	14
900–999	3	.....	.....	.....	5	2	4	2	.....	.....	.....	16
800–899	2	.....	.....	1	3	.....	.....	.....	.....	.....	.....	6
700–799	1	2	1	13	5	1	.....	.....	.....	.....	.....	23
600–699	6	1	4	16	1	1	.....	.....	.....	.....	.....	29
500–599	6	1	32	5	2	.....	1	.....	.....	.....	.....	47
400–499	2	7	26	2	2	1	.....	.....	.....	.....	.....	40
300–399	17	54	15	3	2	.....	.....	.....	.....	.....	.....	91
200–299	14	80	8	3	.....	1	.....	.....	.....	.....	.....	106
100–199	27	48	11	3	.....	.....	.....	.....	.....	.....	.....	89
0–99	20	6	7	1	.....	.....	.....	.....	.....	.....	.....	34
Totals	101	199	104	47	21	10	7	2	2	2	.....	495

r=.61 P.E.= ±.017.

lating the retirement allowance is to give to the retired employe an annuity which is much less than one-half the salary received by the occupant of the position from which he is retired. To be more specific, a teacher who retired in 1919 with a service record entitling her to one-half "final salary" would in 1925 have a retirement allowance about one-fourth of the salary of the teacher who took her position when she retired. If "final salary" were determined by using the average salary for the last five years this condition would be greatly improved for all those who retired in 1923 and thereafter. Such a change in the regulations would, at best, only partially remedy the difficulty, because all of those who retired prior to the period of salary increase could in no way be benefited. It must also be kept in mind that to make any such change must seriously affect costs. To get greater benefits the money to provide them must come from somewhere. The cost side of the question will be discussed more fully in Chapter IV, page 66ff.

MAXIMUM SALARY RESTRICTIONS

When the 1917 law was first passed there was a restriction that no salary in excess of $2,000 could be used in determining retirement allowance. It also provided that no contribution should be made upon the portion of salary in excess of $2,000. Several of the authorities to whom reference has already been made indicate the serious danger of such a limitation[1]. The chief argument

[1]Studensky, P. Teachers Pensions Systems in the U. S. D. Appleton & Co. Page 75.

which they point out is that administrative and supervisory officers of the school system will be inclined to remain in service after they have become more or less inefficient, and that therefore the school system seriously suffers, directly because of the poor supervision, and indirectly because of the dissatisfaction of the younger employes who are deprived of the opportunity for promotion. As was indicated in an earlier portion of this chapter, opinion is by no means uniform upon the question of making the retirement allowance for the higher paid employes bear the same ratio to salary as it does in the case of the lower paid.

Expert Opinion—The following extract of a Report submitted by Mr. George B. Buck[1], Consulting Actuary, is of interest in regard to this question:

"The present act, therefore, discriminates against the high salaried employees inasmuch as their benefits are not based on their actual salaries but on their salaries limited to $2,000. Under the proposed amendment the limit will be removed with the result that the supervising employees who are responsible for the administration of the school system will receive more equitable benefits. The removal of the limit is in line with the trend of modern retirement legislation. The act as originally drafted did not provide such limit. It is believed that the act will operate more advantageously from the viewpoint of the good of the school system as a whole without the limit. Its removal is therefore recommended.

"The following extract from the report of the Committee proposing a superannuation fund for the municipal and shire services of New South Wales presents the conclusion of that Committee in respect to maximum limits,—

> 'The Committee * * * are satisfied that just as a relatively high salary is necessary to call for the higher kinds of ability, so a relatively high pension is required and justified in the case of officers on the

[1]Buck, George B., Consulting Actuary,—"Statement Regarding an Act to Amend the Pennsylvania School Employes' Retirement Act"—File of Senate No. 363. Session of 1925 (Pennsylvania). (Actuary, New Jersey Teachers' Retirement System, Actuary, New York Teachers' Retirement System.)

higher salaries. It has been urged in certain quarters that the State is not called upon to assist in providing for any class more than what is called a working man's pension, or at any rate more than a pension of, say 156 pounds per annum (six units in the Committee's scheme), and that anything above this should be provided wholly by the contributions of the employee himself. But once it is admitted, and the committee believe it must be admitted, that there is an economic necessity to pay the higher grades of service corresponding rates of remuneration —in other words, once it is admitted that equality of reward is unjustifiable—then it follows that equality in pensions is equally unjustifiable. The state actually now proceeds on the assumption that it must pay more for certain kinds of service than for others. For each of the grades of labor there is an economically necessary salary and an appropriate standard of living. It is necessary to maintain the latter in order, in the long run, to evoke the services of that grade; and it seems reasonable to contend that this standard should not be seriously lowered on the retirement of an officer.

'Owing to the necessity of keeping the cost as low as possible, the Committee, it must be admitted, did at one time consider a scheme in which the State would cease to contribute or contribute in a smaller ratio for any pension units above what might be regarded as a fair minimum. They rejected it, however, not merely because it seemed inequitable but because it meant only a small reduction of cost. As will appear from the report of the actuaries, the main expense arises in connection with providing pensions for men on the lower salaries.'

PRECEDENTS FOR PROPOSED AMENDMENT

"The following systems are some of the sound retirement systems of the country which do not limit the salaries upon which contributions are made and benefits based:

New York State Teachers' Retirement System
New York State Employes' Retirement System
New York City Employes' Retirement System
New York City Teachers' Retirement System
Board of Education Retirement System of New York
Hunter College Retirement System of New York
New Jersey Teachers' Pension and Annuity Fund
Duluth Teachers' Retirement System
Young Men's Christian Association Retirement Fund
Employees' Retirement System for the City of Providence."

PROVISIONS OF THE NINE STATES IN REGARD TO SALARY

Table 29 shows the regulations of the nine states in regard to salary. It will be noted that all of the states provide for the accumulation of teachers' contributions with interest. It will also be noted that in six of the states, the retirement allowance is directly related to salary, while in only three is it indirectly related to salary. Where the salary is used as a basis for the direct relationship, four of the states, Connecticut, Massachusetts, New Jersey and New York, use the average for the last ten years of service. New York, New Jersey, Wisconsin and Vermont have no maximum restriction[1] as to the amount of salary which may be included in making the calculations.

Table 29.—Comparison of the Regulations of the Nine States in Regard to Salary

	Conn.	Maine	Mass.	N. J.	N. Y.	Ohio	Pa.	Vt.	Wis.
1. Salary used as a base for determining the									
a. teacher's contributions	Yes[1]	Yes[1]	Yes[1]	Yes	Yes	Yes[1]	Yes	Yes	Yes
b. state's contributions	Ind.[2]	Ind.	Yes	Yes	Yes	Yes[1]	Yes	Yes	Yes[3]
c. portion of the retirement allowance purchased by the teacher's contributions	Ind.	Ind.	Ind.[4]	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.
d. portion of the retirement allowance purchased by the state's contributions	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.	Ind.
2. The retirement allowance is directly related to salary	Yes[5]	No	Ind.	Yes	Yes	Yes	Yes	No	No
3. The retirement allowance is indirectly related to salary	No	Yes	No	No	No	No	No	Yes	Yes
4. The amount of salary used as base is the									
a. average for the last five years of service	Yes[5]	No	Yes	Yes	Yes	No	No	No	No
b. average for the last ten years of service	No	No	No	No	No	Yes	Yes	No	No
c. average for the last thirty years of service	No[6]	No	No	No	No	No	No	No	No
d. average for the entire service	No	Ind.	No	No	No	No	No	Yes	Ind.

[1] Not exceeding $2,000. The maximum annual assessment of $100 is five per cent of $2,000.

[2] Ind.—indirectly—accumulations rather than exact salary used.

[3] The letter P in the following formula indicates the percentage of the teacher's deposit which the State is required to make in each case: 50+5E—H=P. E equals the number of years of experience, and H equals the number of full hundreds of salary above $1,200. P must never exceed 200%. See also Note 11, page 35.

[4] If, at retirement the teacher's accumulations will buy more than $500 annuity at age 60, the excess amount will be returned to the teacher in cash.

[5] Only in so far as the State's share of the allowance is concerned.

Only when period of service is exactly 30 years.

[1] See Appendix II for the effect of the amendments of 1925 in Pennsylvania.

SUMMARY—CHAPTER III

The median salary per month received by the retired employe during the first years of service was $33.30. (See Table 22.)

The median salary per month received by the retired employes during their last years of service was $115.95. (See Table 24.)

The median of the average salaries for the last five years of service was $868.00. (See Table 26.)

The median of the average salaries for the last ten years of service was $759.00. (See Table 27.)

The difference between $868 and $759 represents the effect of recent increases in salary. This situation tends to encourage those who have become unfit to remain in the system to get the benefit of the increased allowance.

The replies to the questionnaire indicate that the retired employes do not approve of the Pennsylvania method of using salary to determine the retirement allowance. Their objections may be summarized as follows:

a. They received low salaries throughout the greater part of their period of service; salaries too low to provide an opportunity to save. (Tables 22, 23, 24, 25, 26.)

b. The decreased purchasing power of money makes the retirement allowance worth only about one-fourth the salaries now paid.

Such complaints may arise after any economic upheaval such as has occurred during the last ten years. Neither the direct method nor the indirect method can prevent the rise of such condition and such complaints. The minimum provided in some states (See Table 39) is only a partial remedy.

The maximum salary of $2,000 used in calculating the retirement allowance is disapproved of by retired employes, special students in this field, and the trend of practice in other states. The more recently established or revised systems of New York, Wisconsin, Vermont and New Jersey have no such limit. (See Tables 29 and 35.) Pennsylvania struck out this restriction in 1925 in order more fully to accomplish the purpose of the retirement system; namely, to eliminate more effectively employes of this class who had become unfit and to make the system more attractive to the higher salaried employes.

CHAPTER IV

COSTS AND BENEFITS

COSTS

THERE must always be a definite relation between benefits and the funds to provide them. Adequate provision must be made for meeting the costs of proposed benefits or the proposed benefits may never be paid.

Contributory vs. Non-contributory Systems. The earlier pensions both public and private were provided entirely by the employer. As the employes had no part in the plans or in the contribution to the cost, they had no way to prevent the employer from changing the plan, reducing the benefits, or stopping them altogether. The contributing system which is generally accepted in all modern pension systems provides that the employes shall share with the employer in the planning and in providing the cost of any retirement systems which may be proposed. Such a method of procedure is now regarded as being the most certain to accomplish the purpose of a retirement system.

Cash Disbursement Plan vs. Reserve Plan. Two systems of providing the costs have been used:

1. The Cash Disbursement Plan provides that during each year the necessary funds to pay retirement allowances that year shall be appropriated by the State in that year.

2. The Reserve Plan provides that during each year of active service a certain sum shall be set aside and allowed to accumulate at compound interest until the time of retirement takes place. The amount set aside each year is estimated to be sufficient to accumulate a sum by the time of retirement which will purchase the desired annuity on the same principle that such a sum would purchase an annuity from a life insurance company.

Practically all studies of the retirement problem favor the

reserve basis.[1] The reasons generally given for preferring the reserve plan are as follows:

1. That the retirement allowance is essentially deferred pay for services rendered and therefore that payments for the retirement allowance should be made at the time the service is rendered.
2. The reserve plan costs less in actual number of dollars set aside because once set aside, these sums gradually accumulate interest which helps to purchase an annuity at the time of retirement.
3. A system operating on a reserve basis is more certain to pay the proposed benefits at the time they are planned to be paid.

Under any cash disbursement plan, if the legislature should not be disposed to set aside the necessary funds in any particular year, the benefits would not be paid in full. Such a situation has frequently occurred in both public and private systems operating under the cash plan. Under the reserve plan when the legislature fails to appropriate the necessary sum in any year, the accumulation of reserves from previous payments makes it possible for the current allowance to be paid in full without interruption.

The history of the pension movement indicates very plainly that any plan which does not provide for the necessary funds to be accumulated on an actuarial reserve basis is certain to encounter great difficulties and is almost certain to be doomed to destruction. This was the result with twelve of the thirteen local systems in Pennsylvania prior to the establishment of the statewide system. This was also the experience of the New York City system and many others. During the last year, Maryland, which operates under such a system was compelled to stop retiring teachers because as Superintendent Cook said, "The necessary legislative appropriations were not forthcoming."

The Pennsylvania System. A Reserve Plan. The Pennsylvania law of 1917 recognized that the retirement allowances were meant to be something more than "deferred pay." They are rights, privileges and benefits jointly contracted for and jointly paid for

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[1]Meriam, L. Principles Governing the Retirement of Public Employes, p. 334.
Studensky, P. Teachers' Pension System in the U. S. D. Appleton, Chap. VI.
Carnegie Foundation. Bulletin No. 12, 1918, p. 24, and also Seventeenth Annual Report, p. 124.

by the individual, the local district and the state. It is not so much a "deferred pay" as it is a "pay as you go" policy. In the first five years of operation the teachers paid their part in full, the local districts have kept well paid up, but the state has frequently been behind. The result has been serious because of the loss of the interest which would have been accumulating on the money if it had been paid on time. This loss has run up into hundreds of thousands of dollars. The Retirement Board has repeatedly called this situation to the attention of the Legislature and the Governor. During the year 1924-1925, a special effort was put forth to cause the state to realize the situation more fully and to take definite steps toward a remedy. Through the efforts of the State Superintendent of Public Instruction, the Retirement Board, and the legislative committee of the Pennsylvania State Education Association, the budget officer included the entire amount of the State's indebtedness in the budget which was presented to the legislature in 1925, and through the combined efforts of all concerned the full amounts in each case were appropriated. The entire amounts were finally approved by the legislature.

In Diagram 5 is shown the accumulation of the funds which are paid in to defray the cost of the retirement allowances. The columns in each case show the amounts which the actuary calculated should have been paid in. The shaded portion of each column shows the amount actually paid in on June 30th of each year from 1920 to 1925 inclusive. The unshaded portion in each case indicates the amount due but not paid. The upper row shows the accumulation in the Employe's Annuity Savings Fund. This is the fund into which the deductions from the employes' salaries are placed. The fact that this money never passes through their hands is quite sufficient explanation of the fact that the entire column in each year is shaded and that this Fund is therefore fully paid up.

The second row of columns indicates the successive yearly conditions of the Contingent Reserve Fund. This is a reserve which is being accumulated to provide the state annuities of that group of employes known as "New Entrants." All employes

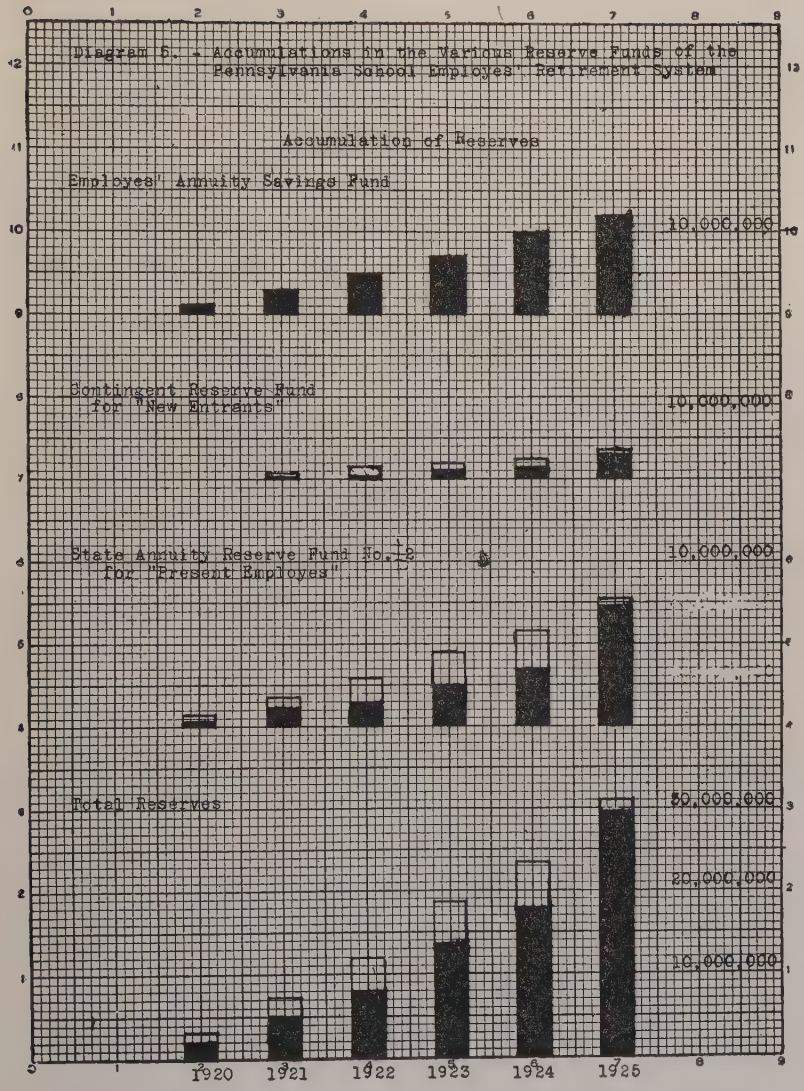


Diagram 5. - Accumulations on the Various Reserve Funds of the Pennsylvania School Employes' Retirement System
Accumulation of Reserves
Employes' Annuity Savings Fund
10,000,000
Contingent Reserve Fund for "New Entrants"
10,000,000
State Annuity Reserve Fund No. 8 for "Present Employes"
10,000,000
Total Reserves
30,000,000
20,000,000
10,000,000
1920
1921
1922
1923
1924
1925

who entered the system since July 1, 1917 are classed as New Entrants. Into this fund the state and the local district pay on an equal basis. Most of the local districts have always kept their share paid up and therefore the unpaid-unshaded portion is largely due to the failure of the State to pay its share on time.

The third row of columns illustrates the corresponding conditions of the State Annuity Reserve Fund No. 2. This is the fund which is designed to provide all state annuities for present employes, i. e. those who were in service prior to July, 1917. Into this fund, also the state and local districts pay on an equal share basis and the explanation of the unshaded portion is the same as for the Contingent Reserve Fund—namely, the State for several years was not paying up its share. The lower row of columns combines the upper three and indicates that while Pennsylvania has been through a period which has been somewhat troublesome, its system now has a fund of over 30 millions in which all shares are almost completely paid up.

Thirty millions of dollars is a large sum viewed from the position of the teacher; it also looms large to the members of the Legislature. An interested State Senator was heard to say, "That Reserve Fund is the greatest danger to the system as well as the greatest asset."

It seems difficult for legislators to understand the need of such a great sum of money and yet they have passed laws requiring insurance companies to accumulate just such reserves. More than five billion dollars are held as reserve by the six leading life insurance companies of America. The Metropolitan Life alone has approximately $1,500,000,000 in reserve. The Pennsylvania fund must continue to climb rapidly until all of those premiums have been paid which should have been paid for service rendered before the system was established. This means the total reserves will exceed $100,000,000 within the next fifteen years.

What Constitutes an Adequate Reserve? During the last months the newspapers have made frequent reference to the fact that industrial pension plans are collapsing. A writer for the *Annalist*[1]

[1]Annalist, The. November and December, 1925.

has made a study of the cause of this collapse and finds it to be the lack of an adequate reserve basis. Most industrial pensions have been operated on a cash basis instead of a reserve basis carefully determined by an expert actuary. The last statement cannot be too strongly emphasized. The actuarial problem of determining what constitutes an adequate reserve for a retirement system is far more complicated than that with which the average life insurance actuary is familiar. The life insurance actuary is chiefly concerned with the mortality rate whereas the retirement actuary in a system like that of Pennsylvania must carefully determine at least seven different rates:

1. Rate of withdrawal from active service.
2. Rate of salary increase during active service.
3. Rate of retirement on account of superannuation.
4. Rate of retirement on account of disability.
5. Rate of mortality in active service.
6. Rate of mortality of superannuation annuitants.
7. Rate of mortality of disability annuitants.

All of these rates are taken into consideration in determining the amounts to be paid into the various funds, to build up the necessary reserve. What this reserve is, how it is accumulated, and how it is used are not commonly understood. The importance or need of the reserve may be expressed briefly in the statement: it is necessary in order to make certain that the money to pay the allowance is on hand at the time when the allowance is due to be paid. The actuaries define it as "the present value of future liability."

The compound interest effect of annual deposits in a savings bank will serve to illustrate how a reserve fund is built up. If $60 is paid into a savings bank each year for forty years, a fund of $6,000 will then be accumulated, whereas only 40 x 60 or $2,400 was actually paid in. The difference is due to the effect of compounding interest annually at 4 per cent. Suppose, at the end of forty years, payments are stopped and $500 each year is drawn out. It will be found that this may be kept up for seventeen years. If it were not for the compounding at 4 per cent on

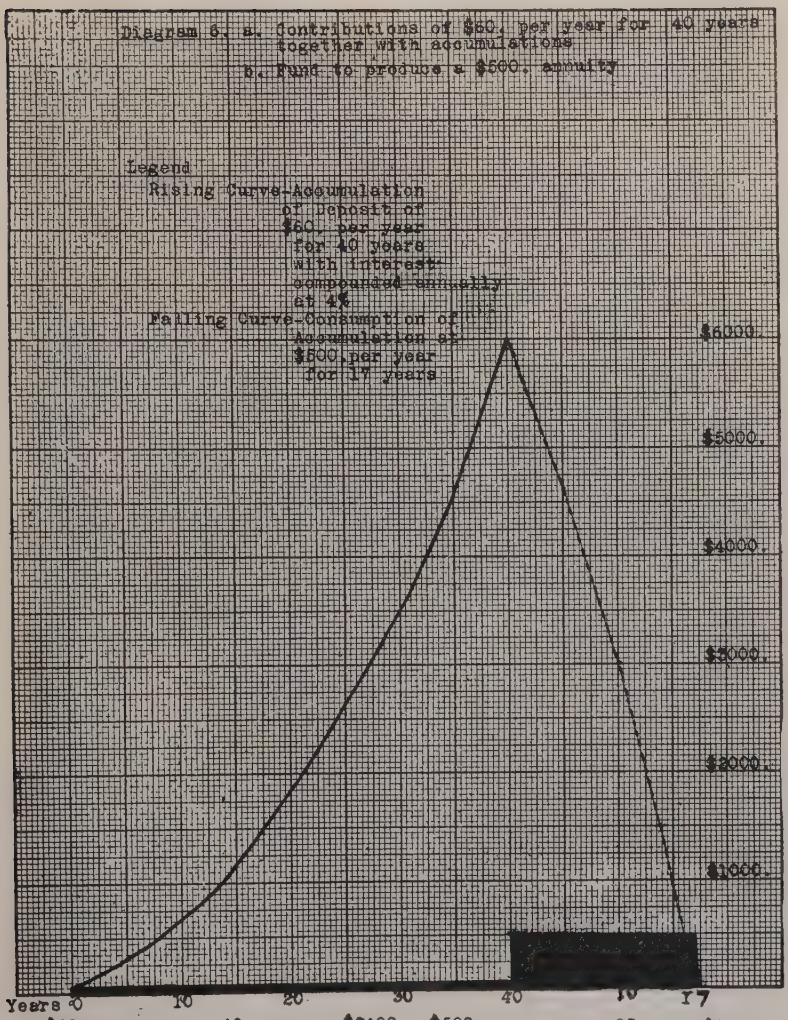
all that remained in the bank each year the fund of $6,000 would have lasted only twelve years.

This is substantially the way the reserve fund works in the Pennsylvania system and is shown by Diagram 6. The rising curve (continuous line) indicates the payment of the retirement allowance. The spaces blocked out in black across the bottom at the left indicate the amount paid in each year or the amounts which the Legislature must appropriate in order to make the reserve system work. The shaded spaces across the bottom at the right indicate the amounts paid out each year, which are also the amounts which the Legislature must appropriate in order to provide the same benefits on a cash disbursement basis. The total appropriation which would have to be made under the reserve system would be 40 x 60 or $2,400. Under the cash disbursement plan the Legislature would have to provide $500 x 17 or $8,500.

The upward portion of the curve is an exact portrayal of the accumulations of the contributions of any individual employe who contributes $60 per year. Others will be in proportion. It is exact for the rate is the same and any employe who withdraws from the service may draw out all that he or she has contributed with 4 per cent interest, for example, a teacher who has contributed $60 per year for 15 years and then decides to leave the system will find that he has approximately $1,250 which he may withdraw.

The falling portion of the curve does not show what actually happens in the Pennsylvania retirement system because at retirement the accumulated contributions of the State are pooled with those of the particular individual in question and with all others who retire that year or who have retired previously. This pooling is done on an accurately determined mathematical basis calculated to provide the specified annuity throughout the life of each of those on the retired list. Some will live longer than 17 years indicated in Diagram 6 and some will not live so long.

The method of operating upon a reserve basis may be likened to the purchase of an annuity from a life insurance company by



$60. per year x 40 years = $2400. $500. per year x 17 yrs. = $8500.

a number of annual payments. Instead of the entire annual premium being paid by the individual, the Pennsylvania plan provides that the State shall pay one-fourth of this annual premium, the local district one-fourth and the individual one-half.

Table 30 illustrates how the nine states are meeting this situation. It is interesting to note that in all of these states the teacher's

Table 30.—Comparison of the Provisions of the Nine States in Regard to Costs

	Conn.	Maine	Mass.	N. J.	N. Y.	Ohio	Pa.	Vt.	Wis.
Future Service									
A. Teacher's share of cost met by									
1. flat rate of	5%	5%	5%	No	4%	4%	No	5%	5%
2. rate adjusted according to age and sex	No	No	No	Yes	No	No	Yes	No	No
3. on a reserve basis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4. on a cash basis	No	No	No	No	No	No	No	No	No
B. Public's share of costs met by an annual contribution									
1. equal to that made by the teacher	No	Yes	No	No	No	No	No	Yes	No[1]
2. less than that of the teacher, but calculated by the actuary to be sufficient to provide a retirement allowance equal to that purchased by the teacher's contributions	No	No	No	Yes	Yes	Yes	Yes	No	No
3. on a reserve basis	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes[1]
4. on a cash basis	Yes	No	Yes	No	No	No	No	No	No
Prior Service									
A. Teacher's share of costs met by public									
1. on a reserve basis	No	No[2]	No	Yes	Yes	Yes	Yes	No	No[2]
2. on a cash basis	Yes	No[2]	No	No	No	No	No	Yes	Yes
B. Public's share of costs met by public									
1. on a reserve basis	No	No[2]	No	Yes	Yes	Yes	Yes	No	No[2]
2. on a cash basis	Yes	No[2]	Yes	No	No	No	No	Yes	Yes
Outside Service credit, cost of									
1. met by public	Yes	Yes	No	Yes	Yes[4]	Yes	No	Yes	Yes
2. met by teacher	No	No	No	No	Yes[4]	No	No	No	No

[1] Does not exactly equal teacher's contribution as shown in Note 11 of Table 12.
[2] Optional with "present employees" to belong to new or old system. Old system provides maximum pension of $300.
[3] May accumulate somewhat in the contingent fund.
[4] New entrants must pay up all costs for service credit outside state.

share is being managed on the reserve basis, but that considerable variation occurs with regard to the method of meeting the state's share of the cost of the benefits. In seven of the nine cases the state's share of the costs for future service is being met on the reserve basis, but in the other two, Connecticut and Massachusetts, the state's share is met by annual cash appropriations.

It cannot be too strongly emphasized that teachers, legislators and the public should fully realize that a definite relationship exists between costs and amounts of benefits. The record of the

Pennsylvania system, so far, indicates that while it has not always been so, all parties concerned have in 1925 fully recognized this relationship, and that the necessary costs are now being regularly set aside to meet in full the benefits when they become payable.

Table 31.—Comparison of the Kind of Benefits Provided by the Nine States

	Conn.	Maine	Mass.	N. J.	N. Y.	Ohio	Pa.	Vt.	Wis.
Superannuation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Disability	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Death									
After retirement according to option selected at time of retirement	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prior to retirement return of accumulations of teacher	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Return of accumulations of the public	No	Yes[1]	No	No	No	No	No	Yes[2]	Yes
Withdrawal									
Return of teacher's accumulations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Return of state's accumulations	No	Yes[1]	No	No	No	No	No	Yes[2]	Yes[3]
Prior Service									
In the state	Yes	Yes[4]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In other states	Yes	Yes[4]	No	Yes[5]	Yes[6]	Yes[5]	No	Yes	No
In private schools	No	No	No	No	No	No	No	No	No

[1] After 6 years of service.
[2] After 6 years of service.
[3] State's deposits may be withdrawn only in the form of an annuity beginning at age 50 or later.
[4] Optional with present employes to belong to new or old system. Old system provides maximum pension of $300.
[5] See Table 12.
[6] New entrants must pay up the cost of all service outside the state.

BENEFITS

Various Kinds of Benefits are Provided by Retirement Systems. They may be classified as follows:

1. Superannuation benefits.
2. Disability benefits.
3. Death benefits.
4. Withdrawal benefits.
5. Prior service benefits.

Table 31 shows a comparison of the kinds of benefits provided by the nine states.

The Superannuation Benefit. It was shown in Tables 6, 12 and 29 that the requirements of eligibility for superannuation retirement varied considerably among the states. Table 31 shows that all of the nine states provided a superannuation benefit even though the requirements according to those other tables varied considerably.

Disability Benefit.

All the nine states provide some form of Disability Benefit. Eligibility for this benefit varies also. This study, however, makes no attempt to investigate the various provisions and conditions under which it may be granted.

Death Benefit

Death Benefits After Retirement. Death benefits are provided for retired employes who exercise the right of option at the time of retirement. Retiring employes may elect to take a lesser retirement allowance while living in order to provide for one or more dependents in case of death. It is important to know that under the present law in Pennsylvania and also in the other eight states this option may not be selected until the retirement is applied for.

To illustrate how the provisions of the Pennsylvania law operates: A teacher 62 years of age applies for retirement and elects to provide a death benefit payable to his wife. Another teacher, similarly situated, elects to continue in service another year. The second teacher has no right to make a selection of a death benefit because he is not retired. Both teachers die at the age of 62½ years. The wife of the one who had retired received a retirement allowance during the remainder of her life; the wife of the one who remained in service received nothing from the contribution of the public although her husband had rendered longer service and was actually in service at the time of his death. It would seem that further discussion would not help to show the inequity of the present provision in Pennsylvania.

Death Benefits Prior to Retirement. Each of the nine states provides that the accumulation of the teacher contribution, with interest, will be paid to the dependents in case of death preceding retirement. Three states—Maine, Vermont and Wisconsin—provide that in case of death preceding retirement the accumulation of public funds contributed on behalf of the employe shall be returned to the dependents. The other six states make no such provision.

Withdrawal Benefits

There is a great deal of difference of opinion as to whether any provision should be made for withdrawing any of the contributions made to a retirement system on behalf of the employes. In the nine states, the practice as shown in Table 31 seems to be very much the same as the provisions made in the case of death. In each case the teachers' accumulations are returned upon the withdrawal of the teacher. Maine and Vermont provide for the return of the state's contributions on behalf of the teacher in all cases where six or more years of service have been rendered. Wisconsin provides that the state's share of the accumulations are returnable only as an annuity to begin at the age of 50 or later. Pennsylvania makes no provision for paying to the teacher any of the State's share of contributions in these cases of withdrawal.

Prior Service Benefits

Each of the nine states provides for recognition of service in the state prior to the establishment of the present law. The provisions are not exactly alike but differ chiefly in their emphasis upon continuity in service from the time of the establishment of the present state system.

Seven of the nine states provide in some way for recognition of prior service in other states. The amount of such service and the conditions under which recognition for it may be secured were shown in Table 12.

Massachusetts and Pennsylvania make no provision whatever for the recognition of service in other states. Wisconsin provides not only for recognition of service in other states but indirectly provides for the recognition of service in private schools. No other state makes provision for the recognition of any service in private schools. The Wisconsin provision differs so greatly from the others that it seems worth while to illustrate how it is applied. The following illustrations of the application of the Wisconsin Law in regard to all prior service were checked as correct by the Secretary of the Wisconsin Retirement Board:

(See formula in Table 29, note 3, page 64)

1. Miss Smith taught ten years in Wisconsin prior to July, 1922. During the year 1922-1923, she received a salary of $1,500. Therefore the state contributes in her behalf 50 plus (50)—3=(97)% of $75 plus $25.
2. During the year 1924-25 she received a salary of $2,000. Therefore the state contributes in her behalf 50 plus (60)—8=(102)% of $100 plus $25.
3. Assuming that she taught continuously until July, 1943; and during the year 1942-43 received a salary of $3,000, the state will contribute in her behalf 50 plus 150—18=182% of $150.
4. Assuming that she continues until July, 1953 and during the year 1952-1953 she receives a salary of $3,500, the state's deposit will be 50 plus 200—23—27=200% of $150 plus $25.

   Note: The 27 is subtracted because of the maximum limit of 200%.
5. Miss Jones' record is the same as the above except that her first ten years of teaching were in the public schools of Ohio. Does this fact in any way change the amount of the state's deposit in illustrations 1, 2, 3 and 4? Answer. No.
6. Miss Davis' record is the same as Miss Smith's except that the first twenty years of teaching were in the public schools of New Jersey. Does this fact in any way change the amount of the state's deposit in illustrations 3 and 4? Answer. No.
7. Miss Rise's record is the same as Miss Smith's except from the 10th to the 20th years' of experience occurred in the Friends' Select School (a private school) in Philadelphia. Does this fact in any way change the amount of the state's deposit in illustrations 3 and 4? Answer. No.

SUMMARY—CHAPTER IV.

The importance of the relationship between costs and benefits is recognized by all of the nine states compared in this study. (Tables 31 and 32.) In fact, this recognition was one of the fundamental reasons for the selection of each of the nine.

The benefits provided vary considerably. (Table 31.) Each of the nine states provides superannuation benefits and disability benefits.

Each provides for the return of the teacher's accumulation in the event of death, while only three provide that the contribution of the state shall be returned, thus furnishing additional protection to dependents.

The cost of including service rendered prior to the establish-

ment of a retirement system is very great. (Diagram 5.) It is, however, recognized by all of the nine states except Maine as important for the good of the system.

SUMMARY—PART I

1. In Pennsylvania the following factors enter into the determination of the retirement allowance,—sex, age at retirement, average salary for the last ten years of service, length of service in the public schools of Pennsylvania. (Chapters II, III and IV.)

2. Certain factors tend to retain in the service those who have become unfit, namely—

a. The minimum age limit of 62 years. (Chapter II.)
b. The requirement of 40 years of service to be eligible for half salary. (Chapter III.)
c. No provision for "outside credit." (Chapter III.)
d. The determination of "final salary" combined with the recent salary increase. (Chapter IV.)
e. Forfeitures in cases of extended absence.[1] (Chapter III.)
f. No salary above $2,000 counted in determining "final salary."[2] (Chapter IV.)

3. Certain factors are not so attractive to employes as those recommended by experts in this field and now practiced in other states, namely,—

a. Minimum age limit of 62 as compared with 50 to 60 in other states. (Chapter II.)
b. Requirement of 40 years of service to be eligible for half salary as compared with a median of 30 years for other states. (Chapter III.)
c. No provision for outside credit as compared with a median of ten years for other states. (Chapter III.)
d. "Final Salary" determined on the basis of last ten years of service, as compared with the basis of last five years for certain other states or with the basis of accumulations recommended by the Carnegie Foundation. (Chapter IV.)

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[1]Partially corrected by amendments of 1925.
[2]Corrected by amendment of 1925. This study, started prior to the Legislative session of 1925, contains some material which was made available to those who were urging the amendments and assisted in their passage.

e. Forfeitures as compared with the non-forfeiture provision recommended by the Carnegie Foundation and now practiced in Maine, Vermont and Wisconsin. (Chapter III.)[2]

f. No allowance for credit beyond the age of 62 as compared with no such limit in other sound systems. (Chapter III.)[1]

4. Pennsylvania carefully considered the question of the costs of the benefits, which the system set out to provide and is meeting them in accordance with actuarial principles. (Chapter IV.)

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[1]Corrected by amendments of 1925. This study, started prior to the Legislative session of 1925, contains some material which was made available to those who were urging the amendments and assisted in their passage.

[2]Partially corrected by amendments of 1925.

PART II

SOCIAL AND ECONOMIC STATUS OF RETIRED SCHOOL EMPLOYES IN PENNSYLVANIA

CHAPTER V

EDUCATION AND TRAINING

MANY *of the teachers in Pennsylvania have had little education beyond the elementary school.* King showed that approximately 39 per cent of the teachers in one-teacher rural schools were without secondary education and that 76 per cent

Table 32.—Education—Years of Training which the Retired Employes have Received Beyond the Eighth Grade as Indicated by the Replies to the Questionnaire

YEARS OF TRAINING	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1	10	12	...	22	1	1	...	1	1	...	...	1	12	13	...	25
2	13	36	...	49	7	3	...	10	1	...	...	1	21	39	...	60
3	8	40	...	48	2	7	...	9	2	1	...	3	12	48	...	60
4	12	39	5	56	8	10	2	20	...	...	1	1	20	49	8	77
5	6	6	1	13	6	3	...	9	...	...	...	...	12	9	1	22
6	4	12	...	16	7	1	...	8	...	...	...	...	11	13	...	24
7	2	5	1	8	3	1	...	4	...	...	...	...	5	6	1	12
8	2	3	1	6	3	...	...	3	...	...	...	...	5	3	1	9
9	...	2	...	2	1	1	...	2	...	...	...	...	1	3	...	4
10	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
11	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
12	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
Total Answers	59	155	8	222	40	27	2	69	4	1	1	6	103	183	11	297
No Answers	43	68	4	115	13	11	...	24	62	8	3	73	118	87	7	212
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				1–12				1–11				1–4				1–12
Median				3				4								4
First Quartile				2				3								2
Third Quartile				4				6								5
Quartile Deviation				1				1.5								1.5

had no normal training[1]. The replies to the questionnaire sent to the retired employes on the retired list indicates very little education or training beyond the eighth grade. Taking this group as a

[1]King, L. A. Status of the Rural Teacher in Pennsylvania. Department of the Interior, *Bur. of Ed. Bulletin*, 1921, No. 34, pp. 29-35.

whole, they were similar, in this respect, to the group studied by King.

AMOUNT OF TRAINING BEYOND THE EIGHTH GRADE

In Table 32, we find that 297 of the 509 retired employes indicated how many years of training they had had beyond the eighth grade. It is probable that many of those, who did not answer this question, had no training beyond the eighth grade. The range was 1 to 12, the median 4, the first quartile 2, the third quartile 5 and the value of Q 1.5. Studying this table from a different point of view it is found that 222 of the 297 have had no training beyond the high schools; that 216 of the 297 have

Table 33.—Academic Degrees Held by Retired Employes

DEGREES	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1. B.A.	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
2. A.B.	...	1	...	1	1	...	...	1	...	...	...	...	1	1	...	2
3. M.A.	4	...	...	4	6	...	...	6	...	...	...	...	10	...	...	10
4. M.S.	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
5. Ph.D.	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
6. Ph.B.	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
Total Answers.	8	1	...	9	9	...	...	9	...	...	...	...	17	1	...	18

had no training beyond the two-year normal; and only 8 have had any training beyond a college degree. The principals and superintendents indicated a larger amount of training than the teachers. The median for the supervisory force being 4 years beyond the eighth grade as compared with three for the teachers. There appears to be very little difference between men and women as to the amount of training they had received.

CERTIFICATES AND DEGREES

Table 33 shows that only 18 indicated that they had degrees; five of which were Bachelors of Arts or Science; twelve were Master's Degrees; and one, the Doctor's Degree. Nine of the 18 were teachers and nine were superintendents or principals; seventeen being men and one a woman.

Table 34 shows the distribution according to the certificates held by the retired employes. Of the 509, 334 answering indicated that they had some form of certificate. 10 were provisional or emergency; 25 were partial or professional; 217 were standard, state or permanent; 12 were special; 62 were normal; and only eight were college certificates.

The amount of professional preparation here indicated is very low compared with modern demands. It is important to have in

Table 34.—Certificates Held by Retired Employes

KIND OF CERTIFICATE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1. Provisional Emergency..	4	5	...	9	...	...	...	...	...	1	...	1	4	6	...	10
2. Partial Professional.....	3	19	...	22	2	1	...	3	...	...	...	...	5	20	...	25
3. Standard State Permanent.....	58	113	3	174	24	18	1	43	...	...	...	...	82	131	4	217
4. Special.....	1	6	2	9	...	3	...	3	...	...	...	...	1	9	2	12
5. Normal.....	9	29	3	41	12	9	...	21	...	...	...	...	21	38	3	62
6. College.....	5	...	1	6	1	1	...	2	...	...	...	...	6	1	1	8
Total Answers.....	80	172	9	261	39	32	1	72	...	1	...	1	117	205	10	334
No Answers.....	22	51	3	76	19	6	1	21	66	8	4	78	102	65	8	175
Total.....	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509

mind that the 334 were largely of the instructional staff, only one being from the group which is classified as "other service." Two of the eight who had college degrees were principals or superintendents; the remaining six were teachers. Six of the eight were men. Of the 62 who held the normal certificate, 41 were teachers, 21 were principals or superintendents. 21 of the 117 men who answered were holders of the normal certificate, whereas 38 of the 205 women who answered held the normal certificate, which indicates that the percentage of men and women holding this certificate was approximately the same.

SOME COMPARISONS BETWEEN RETIRED EMPLOYES AND TEACHERS NOW IN ACTIVE SERVICE

While these three tables, 32, 33 and 34, indicate that the retired employes have not had the education and training which the state

now requires of their successors in these positions, the fact remains that they did have all that was required of them at the time they rendered their service. They had their obstacles to overcome in paving the way for our modern school system. It must be admitted that they met their problems bravely and solved them well as is evidenced by the results. It would be distinctly unfair to evaluate their services on the basis of education and training in the light of present requirements. It is only fair to estimate their worth in the light of values as they were at the time their service was rendered. They fulfilled all that was required of them in the way of education and training, and carried the burden of the organization of the Pennsylvania schools through the long period when salaries were extremely low and the school terms so short. It is difficult to persuade these old teachers to feel that the retirement system was fair or just, or adequate in providing them, after 40, 45 or 50 years of service with a retirement allowance less than one-half of what the beginning teacher now receives. It is also difficult to see how such a retirement system could prove itself sufficiently attractive to draw into the service a higher grade of employe; a claim that is now made for the Pennsylvania system.[1]

Some of the comments which appeared on the returned questionnaires are presented herewith in regard to this particular question.

Questionnaire No. 174—"$20 per month or $240 per annum is not a just compensation for 42½ years' service owing to low salary in rural districts."

No. 196—"Think there should be increase in allowances for those who retired on small annuity owing to low salaries up to time of retirement. I retired just at time salaries were adjusted for last time."

No. 201—"It is impossible in this age to exist on about ninety cents a day, which was about my retirement fund amount."

SUMMARY—CHAPTER V.

The data show that the employes who have retired were not highly educated. It must be borne in mind, however, that their training satisfied the requirements of the Public School system at the time when they rendered their service. Not one question-

[1]See introduction, page 17.

naire returned made any point of training or lack of training as a consideration in the retirement allowance. They emphasized the fact that they met the requirements of their day and rendered long service. This is all their successors are doing today at twice their salaries. As shown in Chapter III, page 53ff, the great decrease in the purchasing power of the dollar gives a logical justification to their claim that they should receive a retirement allowance equal to one-half the salary paid their successors, regardless of training.[1]

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[1]See also page 66ff.

CHAPTER VI

RETIREMENT ALLOWANCES

AMOUNT

IT was pointed out in the introduction that many authorities seemed to have difficulty in stating a definite amount of retirement allowance which they would regard as satisfactory. Meriam[1] classifies the types of amounts into four main heads:

> "1. An amount in aid of subsistence, but not enough by itself to permit an employe to live decently.
> "2. An amount which will secure the minimum of subsistence. This type may be subdivided on the basis of whether it regards the employe as an individual or as the head of a family. A minimum for the man himself is manifestly somewhat different than the amount for the man as a family head.
> "3. An amount which is above the means of subsistence and will permit the family to have the necessaries of its standard in life.
> "4. An amount which will give the retired employe practically what he had as an active employe and involve little or no sacrifice on retirement."

After discussing these four types he discards the first two and the fourth as unsatisfactory, indicating that the third "is probably the cheapest benefit which would be successful in a force with large numbers of employes."

THE PENNSYLVANIA SYSTEM

Method of Calculation. The method of calculating the retirement allowance was explained in the introduction. It is important to remember that it consists chiefly of an employe's annuity determined by the amount of accumulated deductions, and a state annuity, determined upon the basis of years of service and salary.

Minimum and Maximums. No minimum annuity or retirement allowance is provided in the Pennsylvania law.

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[1]Meriam, L. Principles Governing Retirement of Public Employes, p. 156. D. Appleton and Company.

Up until the amendment of 1925 the maximum allowance was limited specifically in two respects:

1st. It was specifically provided that the total state annuity should not exceed fifty per cent of "final salary."

2nd. It was provided that no portion of the salary above two thousand dollars could be used in determining the retirement allowance.

The amendments of 1925 struck out both of these restrictions so that there is now no maximum limitation specifically provided.

Table 35.—Distribution of Retired Employes According to Sex, Position and Annual Retirement Allowance, as shown by the Replies to the Questionnaire

ANNUAL RETIREMENT ALLOWANCE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
0– 99	3	4	1	8	...	1	...	1	12	3	2	17	15	8	3	26
100– 199	28	33	...	61	5	1	...	6	23	2	1	26	56	36	1	93
200– 299	37	48	1	86	6	1	...	7	12	2	...	14	55	51	1	107
300– 399	12	49	7	68	5	9	...	14	8	1	...	9	25	59	7	91
400– 499	4	21	2	27	7	1	...	8	4	1	...	5	15	23	2	40
500– 599	3	32	...	35	3	8	1	12	1	...	...	1	7	40	1	48
600– 699	2	15	...	17	7	3	1	11	1	...	...	1	10	18	1	29
700– 799	3	12	...	15	5	3	...	8	...	...	...	...	8	15	...	23
800– 899	1	1	...	2	1	3	...	4	...	...	...	...	2	4	...	6
900– 999	4	...	...	4	8	3	...	11	1	...	...	1	13	3	...	16
1000–1099	1	1	...	2	6	4	...	10	...	...	...	...	7	5	...	12
1100–1199	1	...	...	1	...	1	...	1	...	...	...	...	1	1	...	2
Total	99	216	11	326	53	38	2	93	62	9	3	74	214	263	16	493
No Report	3	7	1	11	...	...	...	...	4	...	1	5	7	7	2	16
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				49–100				92–1155				45–946				45–1155
Medians				312				587				177				322
First Quartile				215				366				106				204
Third Quartile				480				869				289				526
Quartile Deviation				133				252				92				161

It is important also to remember that in Chapter II it was shown that prior to the passage of this amendment years of service above the age of 62 were counted only if they were also rendered prior to 1919.

Options Provided. Several options are provided from which the employe may make a selection at the time of retirement. (See Appendix I, page 139.) These options are in reality actuarial equivalents of the retirement allowance. They make it possible for the retiring employes to provide some protection to those who

are dependent upon them. In Table 36a it is shown that only 56 of the 425 who replied to this question indicated that they had selected one of the options offered. A large number stated that they had never heard of these options and others stated that they

Table 36a.—Distribution of those who Indicated in the Questionnaire that they had Selected one of the Options Offered at Retirement

WAS OPTION SELECTED?	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
Yes	17	18	2	37	2	3	1	6	10	3	...	13	29	24	3	56
No	76	166	6	248	41	27	1	69	45	4	3	52	162	197	10	369
Total	93	184	8	285	43	30	2	75	55	7	3	65	191	221	13	425
No Answers	9	39	4	52	10	8	0	18	11	2	1	14	30	49	5	84
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509

Table 36b.—Options Selected by Retired Employes

OPTION	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
I	2	6	...	8	1	...	1	2	1	1	...	2	4	7	1	12
II	6	11	1	18	1	2	...	3	6	1	...	7	13	14	1	28
III	3	...	...	3	...	...	...	...	...	...	...	...	3	...	...	3
IV	5	1	...	6	...	1	...	1	3	1	...	4	8	3	...	11
Total	16	18	1	35	2	3	1	6	10	3	...	13	28	24	2	54

did not understand them. Table 36b shows the options selected by the 54 who so indicated.

Retirement Allowances in Pennsylvania are Below the Subsistence Level. In Philadelphia there exists what is known as the Elkins Fund. This fund provides a retirement allowance under certain specified conditions to women teachers who are "without means of support." The interpretation of "without means of support" was placed by the Courts in the hands of a committee of the Board of Education. In 1913 this Committee interpreted these words to mean $200 or less; in 1914 they changed this interpre-

tation to "less than $300;" in 1915 they construed it to mean "less than $400;" in 1920 they changed the interpretation again, this time deciding that any teacher who has an income from all sources of less than $600 was "without means of support." Turning to Table 35, it will be seen that those on the retired list are receiving as a median $322—an amount which according to the above interpretation, would provide only half the necessary "means of support." Further emphasis upon this point will be obtained by studying other portions of this table.

Discussion of Diagram 7. In Diagram 7 is shown the percentage distribution of the retired employes upon the basis of amount of retirement allowance. In each of the columns is shown the relative number of employes receiving less than $200; from $200 to $399; and $400 and over. It will be noted that the distribution is shown also on the basis of sex and position held at the time of retirement. Comparing this diagram with Diagram 4 it will be noted that the retirement allowances in each group are less than one-half of the "final salary" received.

The 1925 Amendments. In previous chapters of this study mention of the passage of amendments in 1925 has been frequently made. The demand for those amendments was widespread and general and they were selected from a number with the belief they would accomplish most to remedy inequalities. Incidentally, of course, they would affect the grand total of the allowance. Table 37 shows the distribution of the entire list of retired employes according to retirement allowance, position, sex, etc. as taken from the records in the office of the Retirement Board. According to this table the median was $341. Table 38 shows the number and distribution of employes retired on account of superannuation, according to the official records of the Retirement Board in July, 1925, after the amendments had taken effect. According to this table the median retirement allowance is $393. A comparison of this and other values of this table with the corresponding values of Table 37 will show that the general effect of the amendments was to raise the retirement allowance about $50 per year or about 14 per cent.

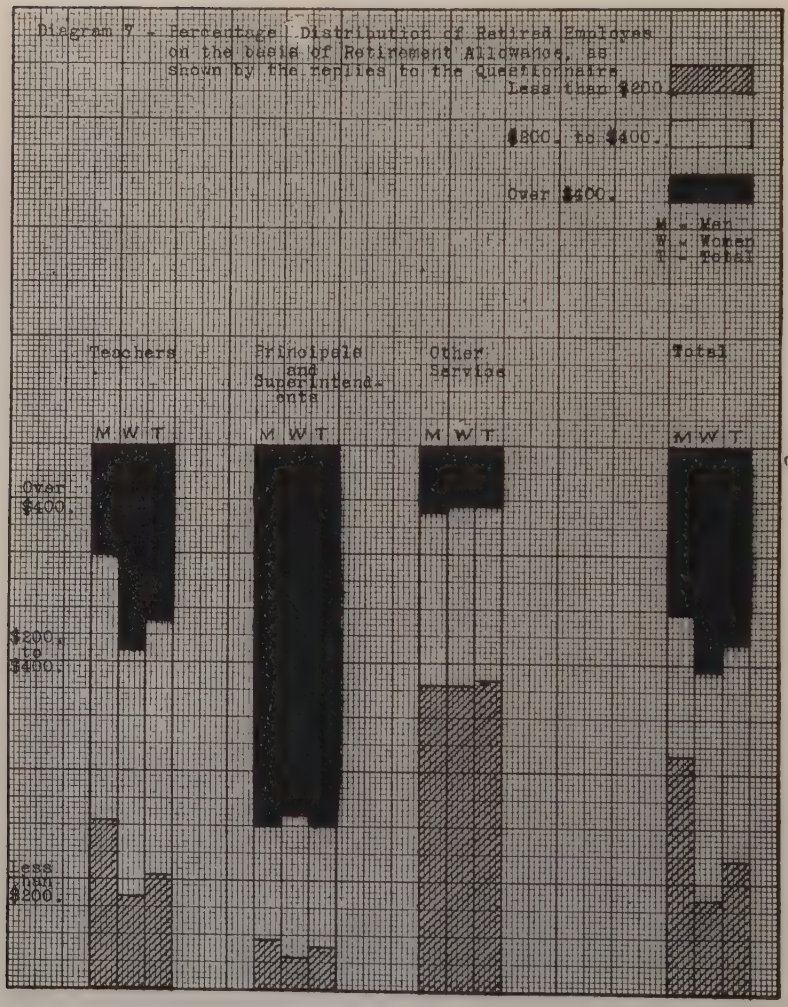


Diagram 7 - Percentage Distribution of Retired Employes on the Basis of Retirement Allowance, as Shown by the Replies to the Questionnaire
Less than $200.
$200. to $400.
Over $400.
M - Men
W - Women
T - Total
Teachers
Principals and Superintendents
Other Service
Total
M W T
Over $400.
$200. to $400.
Less than $200.

The increased allowance shown in the preceding paragraph unquestionably is an aid to subsistence, but in the vast majority of cases the amount is still so low that the retirement allowance can scarcely be regarded as fulfilling the requirements of Type 2 as described by Meriam.[1]

An allowance of approximately $400 in the light of the circular issued by the Pennsylvania Retirement Board makes it truly difficult to see how such an allowance could contribute, first, to

Table 37.—June, 1925—Number and Distribution of Employes Retired on Account of Superannuation According to the Official Records of the Retirement Board June, 1925 PRIOR TO the Effect of the 1925 Amendment. The Distribution is shown in Regard to sex, position held at time of Retirement and retirement Allowance

ANNUAL RETIREMENT ALLOWANCE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0–$ 99	4	7	...	11	...	...	...	...	34	6	...	40	38	13	...	51
100– 199	44	45	...	89	4	1	...	5	53	7	...	60	101	53	...	154
200– 299	57	79	...	136	8	...	...	8	23	3	...	26	88	82	...	170
300– 399	27	80	...	107	4	11	...	15	16	3	...	19	47	94	...	141
400– 499	9	53	...	62	6	...	...	6	9	...	...	9	24	53	...	77
500– 599	5	57	...	62	7	10	...	17	2	...	...	2	14	67	...	81
600– 699	4	42	...	46	12	4	...	16	3	...	...	3	19	46	...	65
700– 799	9	30	...	39	3	3	...	6	...	1	...	1	12	34	...	46
800– 899	5	14	...	20	1	3	...	4	...	...	...	...	7	17	...	24
900– 999	4	4	...	8	12	1	...	13	1	...	...	1	17	5	...	22
1000–1099	4	15	...	19	9	1	...	10	1	...	...	1	14	16	...	30
1100–1199	...	2	...	2	1	...	...	1	1	...	...	1	4	...	...	4
1200–	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	173	428	...	601	67	34	...	101	143	20	...	163	385	480	...	865
Median				360				597				169				341
First Quartile				237				382				101				207
Third Quartile				574				869				286				569
Quartile Deviation				168				243				93				181

the improvement of the morale of those who remain in service, or second, to contribute greatly toward retention in the service of the best of the present employes, or third, to attract to the service a high grade of employe. Of course, it will be admitted that the median retirement allowance will be increased from year to year as the higher salaries become more and more a part of the determination of the "final salary," but in admitting this the fact must

[1]See page 86.

not be lost sight of that the retirement allowance of those already retired will not be increased, and that the moral obligation appears rather plain, to find a method of providing a retirement allowance

Table 38.—July, 1925—Number and Distribution of Employes Retired on Account of Superannuation According to the Official Records of the Retirement Board July, 1925 AFTER the effect of the 1925 Amendments. The Distribution is shown in Regard to Sex, position held at Retirement and Retirement Allowance

ANNUAL RETIREMENT ALLOWANCE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0–$ 99	4	6	...	10	...	...	...	...	7	2	...	9	11	8	...	19
100– 199	24	35	...	59	3	1	...	4	64	9	...	73	91	45	...	136
200– 299	69	67	...	136	5	1	...	6	35	4	...	39	109	72	...	181
300– 399	38	82	...	120	7	3	...	10	29	2	...	31	74	87	...	161
400– 499	14	54	...	68	4	9	...	13	9	...	...	9	27	63	...	90
500– 599	12	62	...	74	6	4	...	10	5	1	...	6	23	67	...	90
600– 699	3	50	...	53	11	7	...	18	5	...	...	5	19	57	...	76
700– 799	5	44	...	49	9	5	...	14	...	1	...	1	14	50	...	64
800– 899	4	27	...	31	3	2	...	5	1	...	...	1	8	29	...	37
900– 999	4	28	...	32	1	3	...	4	...	...	...	...	5	31	...	36
1000–1099	4	7	...	11	4	...	...	4	1	...	...	1	9	7	...	16
1100–1199	2	2	...	4	2	1	...	3	...	...	...	...	4	3	...	7
1200–1299	2	4	...	6	4	2	...	6	...	...	...	...	6	6	...	12
1300–1399	1	2	...	3	5	3	...	8	...	...	...	...	6	5	...	11
1400–1499	...	4	...	4	...	...	...	...	1	...	...	1	1	4	...	5
1500–1599	...	3	...	3	2	...	...	2	1	...	...	1	3	3	...	6
1600–1699	...	4	...	4	2	...	...	2	...	...	...	...	2	4	...	6
1700–1799	...	3	...	3	2	...	...	2	...	...	...	...	2	3	...	5
1800–1899	1	2	...	3	2	...	...	2	...	...	...	...	3	2	...	5
1900–1999	...	...	...	...	1	1	...	2	...	...	...	...	1	1	...	2
2000–2099	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
2100–2199	...	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2
2200–2299	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
2300–2399	1	...	...	1	2	...	...	2	...	...	...	...	3	...	...	3
2400–2499	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
2500 and over	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
Total	190	488	...	678	75	42	...	117	158	19	...	177	423	549	...	972
Median				421				692				217				393
First Quartile				274				471				148				246
Third Quartile				678				1125				338				668
Quartile Deviation				202				377				95				221

which will be adequate to meet the economic needs of the retired employe when the purchasing power of the dollar is so sharply changed.[1]

PROVISIONS OF THE NINE STATES

In Table 39 is shown the provisions of the nine states in regard to superannuation retirement allowances. It will be noted that

[1]As to constitutionality in New York, see Cases Mahon v. Board of Education, 171 N. Y. 263 People ex-rel Woody v. Partridge, 172 N. Y. 305.

five states provide a minimum ranging from $300 to $400. It will be noted also that four states limit the maximum allowance to $1,000. All states provide some form of option but only at retirement.

The actual amounts of retirement allowances provided by the various states cover a wide range. Vermont reports an average of $201 per year for June, 1925 and New Jersey reports an average of $928 based upon the same month. The other states report-

Table 39.—Comparison of the Provisions of the Nine States in Regard to Retirement Allowances—Superannuation

	Conn.	Maine	Mass.	N. J.	N. Y.	Ohio	Pa.	Vt.	Wis.
Minimum	350	None	400[2]	400[10]	400[3]	300[4]	None	None	None
Maximum—State	500	500	500[9]	None	None	None[5]	None	None	None[6]
Teacher	500[7]	500[8]	500	None	None	None[5]	None	None	None
Options offered at retirement	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Average Retirement Allowance for the month of June, 1925	475	.....	663	928	859	.....	370	201	462

The minimum is $350 in all cases of 35 years of service, of which at least 20 in Connecticut and the last five preceding were in Connecticut; also, in case of retirement at age sixty or later with at least 15 years of service in Connecticut and the last five preceding retirement were in Connecticut. The minimum is $500 if retirement occurred prior to June 30, 1917 and after age 65 and if 40 years of service had been rendered in public schools, of which 25 must have been in the public schools of Connecticut.

[2] a. For teachers who served in Massachusetts prior to July 1, 1914 and have rendered at least 15 years of service prior to retirement.
b. All other teachers are not guaranteed a minimum.

[3] 25 years of service in the public schools of New York.

[4] 36 years of service in the public schools of Ohio.

[5] No contributions allowed on salaries in excess of $2,000 and therefore Retirement Allowance is limited to approximately $1,000 at age 60.

[6] In determining the state's deposit, as shown in Note 3 in Table 29 any teacher's deposit in excess of $150 shall be disregarded.

[7] The amount will be just what the teacher's accumulations will buy. The teacher may, but is not compelled to, contribute after a sufficient sum has been accumulated to purchase an annuity of $500 beginning at age sixty.

[8] Same as Note 7 above except that only thirty annual assessments are made.

[9] $500 at age 60 but increases to about $750 at age 70.

[10] No minimum is granted where less than 20 years of service has been rendered.

ing give amounts which fall between these two extremes. It will be noted that Pennsylvania is next to the bottom of the list with an average of $370. Pennsylvania is the only one of these systems which includes all school employes. It might be assumed that the inclusion of all employes would seriously change the average allowance. Table 35 and Diagram 7 would seem to indicate that the effect of the inclusion of all other employes did not greatly affect the average.

SUMMARY—CHAPTER VI.

The retirement allowance provided by the Pennsylvania system is inadequate in that it falls below the subsistence level. It provides

no minimum or maximum retirement allowance. Five states provide a minimum ranging from $300 to $400; four states provide a maximum of approximately $1,000. (See Table 39.)

The Carnegie Foundation recommends neither minimum nor maximum, but an amount determined entirely by the value of the total contributions and accumulations such as is now practiced by the states of Vermont and Wisconsin.

CHAPTER VII

INCOME OTHER THAN RETIREMENT ALLOWANCE

THE younger teachers as a rule, as indicated in the National Education Association[1] reports and those of the Carnegie Foundation[2], do not approve of contributing toward a retirement allowance. The reasons which they frequently give are:

First, that they never expect to receive any benefit from it;
Second, that they can invest the money in a way in which it will be of greater value to them;
Third, that it is a reflection upon their intelligence to assume that they will not adequately provide for themselves.

These same reports have shown that teachers who live to the age of retirement have for many reasons not made safe and adequate investment.

Tables 40, 42, 43 and 44 indicate the income which the Pennsylvania retired employes actually have other than their retirement allowance. Table 46 indicates the explanation given by these retired employes as to why they did not save more. Table 47 indicates to what extent the retired employes are dependent upon others for support. Table 48 indicates amounts estimated by the retired employes to be necessary to meet their present minimum needs.

ANNUAL INCOME FROM PERSONAL SAVINGS

One of the explanations sometimes given for making the amount of retirement allowance one-half the salary is that the employe ought to save the other half himself. In the case of teachers, the fact is that they do not save enough to provide an income anywhere near half of the salary which they had formerly been receiving. In Table 40 it is shown that among 433 who indicated the amount of their income from personal savings, 153

[1]National Education Association Committee on Retirement Allowance Report, 1924.
[2]Carnegie Foundation, Nineteenth Annual Report, 1924, p. 141. Carnegie Foundation, Twentieth Annual Report, 1925, p. 18ff.

stated that they had no income, 143 indicated an income of less than $200 and 52 had an income between $200 and $300. Only 95, therefore, of the 443 had an income from personal savings in excess of $300. The median for the entire group is $103, the first Quartile zero, the third Quartile $270 and the Quartile deviation $135. It should be kept in mind that the median of the "final

Table 40.—Distribution of Retired Employes According to Sex, Position and Total Income from Personal Savings, as shown by the Replies to the Questionnaire

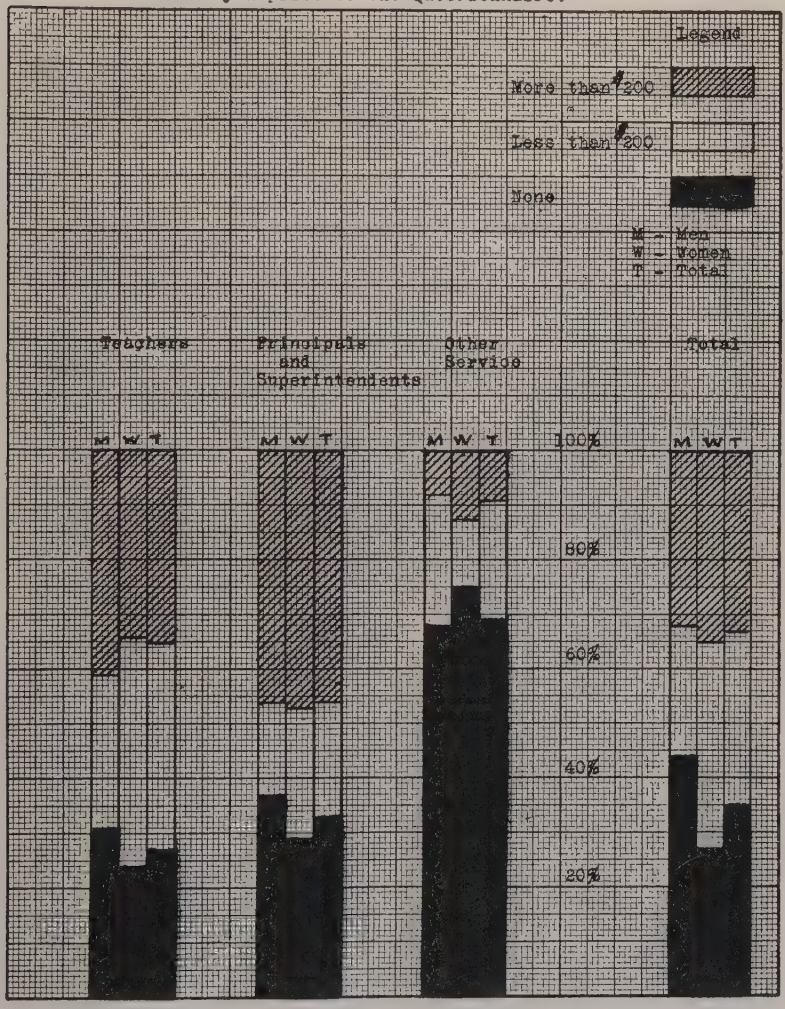
TOTAL INCOME FROM PERSONAL SAVINGS	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
None	28	47	3	78	17	10	...	27	40	6	2	48	85	63	5	153
$ 0– 99	9	38	3	50	2	6	...	8	8	...	...	8	19	44	3	66
100– 199	16	43	2	61	6	2	1	9	6	1	...	7	28	46	3	77
200– 299	16	26	1	43	4	4	1	9	...	...	...	...	20	30	2	52
300– 399	3	19	...	22	1	2	...	3	1	1	...	2	5	22	...	27
400– 499	2	6	...	8	4	4	...	8	3	...	...	3	9	10	...	19
500– 599	5	5	...	10	1	...	...	1	1	...	...	1	7	5	...	12
600– 699	1	2	...	3	...	2	...	2	...	...	...	...	1	4	...	5
700– 799	1	1	...	2	...	2	...	2	...	...	...	...	1	3	...	4
800– 899	2	1	...	3	1	...	...	1	...	...	...	...	3	1	...	4
900– 999	...	...	...	...	1	...	...	1	...	...	...	...	1	...	...	1
1000–1099	3	3	...	6	5	2	...	7	...	...	...	...	8	5	...	13
1100–1199	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
1200–1299	...	...	...	...	2	...	...	2	...	...	...	...	2	...	...	2
1300–1499	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
1500 and over	2	2	...	4	1	...	...	1	...	...	...	...	3	2	...	5
Total	90	193	9	292	46	34	2	82	59	8	2	69	195	235	13	443
No Report	12	30	3	45	7	4	...	11	7	1	2	10	26	35	5	66
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range	$0–6000				0–2300				0–514				0–6000			
Medians	130				167				0				103			
First Quartile	0				0				0				0			
Third Quartile	270				469				47				270			
Quartile Deviation	135				235				23				135			

salaries" of these retired employes was $759,* an amount which is more than seven times the median income from personal savings as shown in this Table.

In Table 41 is shown the relation of the average salary for the last ten years to the income from personal savings. It will be noted that the correlation is low, the value of r being only .24 P.E. = ± .031. It seems to be a rather common idea to expect that an employe with a high salary is able and should save more than

*See Table 27.

Diagram 8 - Percentage Distribution of Retired Employes on the Basis of Total Income from Personal Savings, as shown by Replies to the Questionnaire.



one on a lower salary. Several of the questionnaires had such a thought expressed under the heading of remarks. Table 41, however, shows that in actual practice the higher salaried employes did not have as much in proportion to their salaries.

Table 41.—Relation of Average Salary—Last Ten Years to Income from Personal Savings

Income*	0–399	400–799	800–1199	1200–1599	1600–1999	2000–2399	2400–2799	2800–3199	3200–3599	3600–3999	Total
$1400 and over		3		2							5
1300–1399						1					1
1200–1299			1				1				2
1200–1199		1									1
1000–1099	1	1	4	2	3		1				12
900–999					1						1
800–899		2			1		1				4
700–799					2						2
600–699		1	2	1	1	1					6
500–599		5	3	1	2		1				12
400–499	1	4	5	1	2	1	1	0	1		16
300–399	1	14	5	3	1	1		1			26
200–299	5	21	12	7	2		1	1			49
100–199	4	37	19	7	3	1					71
0–99	17	92	46	20	4	4	1		1	1	186
Total	29	180	98	44	22	9	7	2	2	1	394

r=.24 P.E.= ±.031.
*Amount of income from personal savings.

Table 42.—Distribution of Retired Employes According to Sex, Position and Total Income from Inheritance, as shown by the Replies to the Questionnaire

TOTAL INCOME FROM INHERITANCE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
None	71	125	7	203	34	21	1	56	59	7	2	68	164	153	10	327
$ 0–$ 99	2	16	...	18	1	1	...	2	3	1	...	4	6	18	...	24
100– 199	2	13	...	15	...	2	...	2	...	...	...	...	2	15	...	17
200– 299	2	3	2	7	3	3	...	6	...	...	...	...	5	6	2	13
300– 399	2	2	1	5	1	...	...	1	...	...	...	...	3	2	1	6
400– 499	...	6	...	6	...	...	...	...	...	...	...	...	...	6	...	6
500– 599	1	3	...	4	1	1	...	2	...	...	...	...	2	4	...	6
600– 699	...	2	...	2	1	2	...	3	...	...	...	...	1	4	...	5
700– 799	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
800– 899	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
900– 999	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
1000–1099	1	1	...	2	...	1	...	1	...	...	...	...	1	2	...	3
1100–1199	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
1200 and over	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Total	82	173	10	265	41	31	1	73	62	8	2	72	185	212	13	410
No Report	20	50	2	72	12	7	1	20	4	1	2	7	36	58	5	99
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range	0–1500				0–1000				0–65				0–1500			
Medians	0				0				0				0			
First Quartile	0				0				0				0			
Third Quartile	0				0				0				0			
Quartile Deviation	0				0				0				0			

ANNUAL INCOME FROM INHERITANCE

From inheritance, 327 out of 410 retired employes indicated that they had no income, as shown by Table 42; 54 had an income from inheritance of less than $300, leaving only 29 with an income from this source of more than $300.

INCOME FROM POSITION TAKEN SINCE RETIREMENT

A great many of those who replied to the questionnaire indicated that they had tried to secure employment but that, as an old retired

Table 43.—Distribution of Retired Employes According to Sex, Position and Total Income from Position Taken since Retirement, as shown by the Replies to the Questionnaire

TOTAL INCOME FROM POSITION TAKEN SINCE RETIREMENT	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
None	55	141	7	203	29	25	...	54	41	6	2	49	125	172	9	306
$ 0–$ 99	4	2	...	6	2	...	...	2	2	...	...	2	8	2	...	10
100– 199	7	4	1	12	1	...	...	1	3	...	...	3	11	4	1	16
200– 299	6	3	...	9	...	...	...	...	4	1	...	5	10	4	...	14
300– 399	2	1	...	3	2	1	...	3	2	...	...	2	6	2	...	8
400– 499	1	...	...	1	1	...	...	1	2	...	1	3	4	...	1	5
500– 599	1	1	...	2	...	...	...	...	...	...	...	...	1	1	...	2
600– 699	...	1	...	1	...	...	...	...	1	...	...	1	1	1	...	2
700– 799	3	...	...	3	1	...	...	1	...	...	...	...	4	...	...	4
800– 899	3	...	...	3	...	...	...	...	2	...	...	2	5	...	...	5
900– 999	...	...	...	...	1	...	...	1	1	...	...	1	2	...	...	2
1000–1099	1	...	...	1	2	...	...	2	...	...	...	...	3	...	...	3
1100–1199	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1200–1299	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1300 and over	2	1	...	3	5	...	...	5	...	...	...	...	7	1	...	8
Total	85	154	8	247	44	26	0	70	58	7	3	68	187	187	11	385
No Report	17	69	4	90	9	12	2	23	8	2	1	11	34	83	7	124
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range	0–5500				0–2000				0–900				0–5500			
Medians	0				0				0				0			
First Quartile	0				0				0				0			
Third Quartile	0				0				100				0			
Quartile Deviation	0				0				50				0			

teacher, it seemed impossible. They wrote of the desire to obtain a position as being caused somewhat by a wish to do something, but mainly by the great need of funds. In Table 43 it will be observed that of those who stated how much annual income they had from the position taken since retirement, 306 gave the answer "none," 124 did not answer the question at all. Of the 79 who were receiving an income from a new position, 40 were receiving

less than $300. The median, first Quartile, and third Quartile in this table have the value of zero, indicating that among the whole group of retired employes the income from positions taken since retirement is a negligible quantity.

If all the income from personal savings, inheritance and position taken since retirement are combined the values shown in Table 44 are obtained. Among the 439 replies included in this

Table 44.—Distribution of Retired Employes on the Basis of Sex, Position and Total Income (not including Retirement Allowance), as shown by the Replies to the Questionnaire

TOTAL INCOME NOT INCLUDING RETIREMENT ALLOWANCE	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
None	19	33	3	55	11	9	...	20	28	4	2	34	58	46	5	109
$ 0–$ 99	8	30	1	39	3	3	...	6	7	2	...	9	18	35	1	54
100– 199	10	40	...	50	4	1	1	6	7	1	...	8	21	42	1	64
200– 299	12	28	2	42	3	4	1	8	3	1	...	4	18	33	3	54
300– 399	3	18	2	23	3	4	...	7	1	1	...	2	7	23	2	32
400– 499	9	13	1	23	2	2	...	4	3	...	2	5	14	15	3	32
500– 599	3	6	...	9	1	2	...	3	...	...	...	...	4	8	...	12
600– 699	2	3	...	5	1	3	...	4	3	...	...	3	6	6	...	12
700– 799	3	3	...	6	...	2	...	2	2	...	...	2	5	5	...	10
800– 899	3	2	...	5	2	1	...	3	...	...	...	...	5	3	...	8
900– 999	1	1	...	2	1	...	...	1	2	...	...	2	4	1	...	5
1000–1099	6	6	...	12	5	3	...	8	1	...	...	1	12	9	...	21
1100–1199	3	1	...	4	2	...	...	2	...	...	...	...	5	1	...	6
1200–1299	...	1	...	1	3	1	...	4	...	...	...	...	3	2	...	5
1300–1399	1	1	...	2	4	...	...	4	...	...	...	...	5	1	...	6
1400–1499	1	1	...	2	...	...	...	...	...	...	...	...	1	1	...	2
1500 and over	3	2	...	5	2	...	...	2	...	...	...	...	5	2	...	7
Total	87	189	9	285	47	35	2	84	57	9	4	70	191	233	15	439
No Report	15	34	3	52	6	3	...	9	9	...	...	9	30	37	3	70
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				0–6000				0–2400				0–1050				0–6000
Medians				197				329				11				188
First Quartile				42				17				0				1
Third Quartile				421				900				238				451
Quartile Deviation				190				442				119				225

table, 109 indicated that the total income from all sources other than retirement allowance is zero; 172 indicated a total income other than retirement allowance of less than $300. The median amount was $188, first Quartile $1, and the third Quartile $451, showing that there is a considerable range in the amount of income received. It will be remembered that Table 35 showed the median retirement allowance to be $322 and therefore we see that the

total income, as shown by the median of $188, is about 58 per cent of the retirement allowance.

In Table 45 there is evidence of a situation similar to that shown in Table 41. In this case the average salary for the last ten years is indicated in its relation to the total income other than retirement allowance rather than to the income from personal savings. It will be noted that this includes income from all sources other than the retirement allowance. The value of r in this case is very much the same as in Table 41; namely, .22 P.E. = ± .031.

Table 45.—Relation of Average Salary—Last Ten Years to Total Income other than Retirement Allowance

Average Salary Last Ten Years

Income*	0–399	400–799	800–1199	1200–1599	1600–1999	2000–2399	2400–2799	2800–3199	3200–3599	3600–over	Total
$1400 and over	.....	5	2	3	1	.....	1	.....	.....	.....	12
1300–1399	1	1	1	.....	.....	1	.....	1	.....	.....	5
1200–1299	.....	.....	1	2	.....	.....	2	.....	.....	.....	5
1100–1199	2	1	.....	.....	3	.....	.....	.....	.....	.....	6
1000–1099	5	5	5	1	3	1	.....	.....	1	.....	21
900–999	1	.....	2	.....	2	.....	.....	.....	.....	.....	5
800–899	2	4	.....	.....	.....	.....	2	.....	.....	.....	8
700–799	2	1	3	3	1	.....	.....	.....	.....	.....	10
600–699	.....	3	4	1	1	1	1	.....	.....	.....	11
500–599	3	8	1	1	1	.....	.....	.....	.....	.....	14
400–499	4	15	9	1	1	1	.....	.....	1	.....	32
300–399	6	10	8	4	2	1	.....	.....	.....	1	32
200–299	12	23	10	6	2	.....	.....	1	.....	.....	54
100–199	8	29	16	6	3	2	.....	.....	.....	.....	64
0–99	33	66	31	17	2	3	1	.....	.....	.....	153
Total	79	171	93	45	22	10	7	2	2	1	432

r=.22 P.E.= ±.031.
*Total income other than retirement allowance.

EXPLANATION GIVEN FOR SMALL PERSONAL SAVINGS

Table 46 shows that 424 of the 481 giving an explanation of why they did not save more, regarded the small salary which they received during service as one of the important reasons; 247 gave the explanation that a number of dependents had prevented them from being able to save more; 147 stated that the education of children, in most cases their own, but occasionally nephews or nieces, had used up their savings; 64 mentioned bad investments and some of these went into details to show the type of investment which they had been led to make[1]; 18 indicated that they

[1]The information given would be additional proof of the correctness of the statement which frequently appears in financial periodicals to the effect that teachers as a group form a fertile field for the practice of financial sharks.

had not looked ahead to provide properly for the condition in which they now find themselves; 2 mentioned loss by fire; 3 mentioned taxes and repairs; and 23 named sickness among other causes. In all, 481 of the 509 who answered the questionnaire gave some reasons; among these a few gave four or five reasons; others gave only one reason, and the average number of reasons given per questionnaire was 1.9. Many of the replies contained

Table 46.—Distribution of Replies on the Basis of the Explanation given for the fact that the Accumulation of Personal Savings was so Small

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1. Large Number of dependents	38	123	6	167	25	20	1	46	29	4	1	34	92	147	8	247
2. Too small salary	88	178	11	277	51	32	2	85	52	8	2	62	191	218	15	424
3. Education of children	42	37	2	81	34	7	0	41	21	3	1	25	97	47	3	147
4. Bad investments	17	29	2	48	3	7	0	10	6	0	0	6	26	36	2	64
5. Not looking ahead	6	3	2	11	1	4	0	5	2	0	0	2	9	7	2	18
6. Loss by fire	1	1	0	2	0	0	0	0	0	0	0	0	1	1	0	2
7. Sickness	4	7	0	11	3	3	0	6	4	1	1	6	11	11	1	23
8. Taxes and repairs	1	2	0	3	0	0	0	0	0	0	0	0	1	2	0	3
Total	197	380	23	600	117	73	3	193	114	16	5	136	428	469	31	928
Average number of reasons given	2.0	1.8	2.1	1.9	2.2	2.0	1.5	2.1	1.9	1.8	2.5	1.9	2.0	1.8	2.0	1.0
Total giving some reason	96	210	11	317	52	37	2	91	62	9	2	73	210	256	15	481
No Answer	6	13	1	20	1	1	0	2	5	0	1	6	12	14	2	28
Total	102	223	12	337	53	38	2	93	67	9	3	79	222	270	17	509

special notes of emphasis upon the effect of the small salaries and the short terms. Among others were the following:

"$20 per month or $240 per annum is not a just compensation for 42½ years' service owing to low salary in rural districts."

"I think the allowance is too small for the rural teacher who could teach only the minimum term or the minimum salary."

"I certainly think that teachers who were not teaching after salaries were raised ought to have a higher rate."

"Old teachers who received small salaries are getting small retirement allowance. This does not seem right."

"The value of the dollar at the present time should be taken into consideration, and the minimum annuity should be $1,200."

ARRANGEMENT FOR MEETING THE PRESENT COST OF LIVING

The information presented in Table 47 is what might reasonably be expected to follow the information so far given in regard to the total income of retired employes,—namely that many are dependent at least partially upon relatives or friends for support.

Table 47.—Distribution of Replies to the Questions Indicated

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1. Do you live with relatives or friends?																
Yes	28	114	4	146	8	15	2	25	28	6	2	36	64	135	8	207
No	63	87	6	156	37	17	9	54	32	3	2	37	132	107	8	247
Total Answers	91	201	10	302	45	32	2	79	60	9	4	73	196	242	16	454
No Answers	11	22	2	35	8	6	0	14	6	0	0	6	25	28	2	55
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
2. If so, do you pay board?																
Yes	15	69	6	90	4	12	2	18	17	4	0	21	36	85	8	129
No	45	90	3	138	21	10	0	31	28	3	4	35	94	103	7	204
Total Answers	60	159	9	223	25	22	2	49	45	7	4	56	130	188	15	333
No Answers	42	64	3	109	28	16	0	44	21	2	0	23	91	82	3	176
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
3. Do you pay for room?																
Yes	5	39	3	47	4	6	1	11	8	5	1	14	17	50	5	72
No	50	105	3	158	21	14	0	25	33	1	3	37	104	120	6	230
Total Answers	55	144	6	205	25	20	1	46	41	6	4	51	121	170	11	302
No Answers	47	79	6	132	28	18	1	47	25	3	0	28	100	100	7	207
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
4. Do you receive a cash allowance from them?																
Yes	5	2	0	7	0	0	0	0	1	0	0	1	6	2	0	8
No	59	159	8	226	28	20	1	49	49	6	4	59	136	185	13	334
Total Answers	64	161	8	233	28	20	1	49	50	6	4	60	142	187	13	342
No Answers	38	62	4	104	25	18	1	44	16	3	0	19	79	83	5	167
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
5. Do you receive any sort of aid from any source that is not included in the above?																
Yes	11	26	0	37	4	3	0	7	10	2	0	12	25	31	0	56
No	73	158	11	142	41	26	2	69	46	6	3	55	160	190	16	266
Total Answers	84	184	11	279	45	29	2	76	56	8	3	67	185	221	16	422
No Answers	18	39	1	58	8	9	0	17	10	1	1	12	36	49	2	87
Total	102	233	12	337	53	38	2	93	66	9	4	79	221	270	18	509

There are 207 actually living with relatives or friends, but only 129 of these are paying any board; 72 of the 207 pay for room, and 8 of them not only are not able to pay for either board or room but receive a cash allowance from their relatives or friends. It will be noted that 56 receive financial aid in some way other than that otherwise indicated. A few of these explained their answers; for instance:

"Owing to a stroke of paralysis three years ago and the same year a broken hip, makes my expenses more than the average retired teacher, as I need some care. My expenses at present are $65 per month and am helped by an old pupil to meet my expenses. Haven't any close kin."

Table 48.—Amounts Indicated by the Replies to the Questionnaire as Necessary to meet Present Minimum Needs

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
$ 0–$ 99	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
100– 199	2	2	...	4	...	...	...	...	...	1	...	1	2	3	...	5
200– 299	3	5	...	8	...	1	...	1	7	2	...	9	10	8	...	18
300– 399	15	21	1	37	2	1	...	3	7	2	1	10	24	24	2	50
400– 499	15	19	...	34	5	...	...	5	11	1	...	12	31	20	...	51
500– 599	5	17	2	24	2	1	...	3	2	...	1	3	9	18	3	30
600– 699	20	38	3	61	8	6	1	15	15	2	...	17	43	46	4	93
700– 799	...	11	...	11	4	...	...	4	2	...	...	2	6	11	...	17
800– 899	1	11	...	12	1	1	1	3	2	...	...	2	4	12	1	17
900– 999	1	8	2	11	2	2	...	4	8	...	...	8	11	10	2	23
1000–1099	8	16	...	24	4	3	...	7	...	...	...	...	12	19	...	31
1100–1199	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1200–1299	1	6	...	7	4	3	...	7	...	...	...	...	5	9	...	14
1300–1399	...	1	...	1	...	1	...	1	...	...	...	...	...	2	...	2
1400–1499	1	1	...	2	3	1	...	4	1	...	...	1	5	2	...	7
1500 and over	1	...	...	1	5	2	...	7	...	...	...	...	6	2	...	8
Total	73	157	8	238	40	22	2	64	55	8	2	65	168	187	12	367
No Report	29	66	4	99	13	16	...	29	11	1	2	14	53	83	6	142
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range			100–2000				200–2700				100–1500				100–2700	
Medians			636				833				517				632	
First Quartile			431				627				363				437	
Third Quartile			705				1243				681				666	
Quarile Deviation			137				308				159				214	

"I could not live on my income were it not that my wife is an annuitant of New Jersey."

AMOUNTS INDICATED AS NECESSARY TO MEET MINIMUM NEEDS

In Table 48 is found some of the most interesting information brought out by the questionnaire: 367 of the 509 indicated an amount which they regard as necessary in order to meet the minimum needs of life. The replies range from $100 to $2,700 and the median is $632. Comparing this with both retirement allowance, Table 35 and "final salary," Table 28, it is seen that the amount indicated is less than the "final salary" but much greater

than half final salary or the retirement allowance. Some of those who did not state a specific amount wrote in expressions of regret for their inability to give a definite answer and that they feared illness and other causes would require more in the future than they had been able to get along with in the past. It must be unquestionably admitted that operations and sickness are more frequent among those of retirement age than among younger people and, therefore increased financial burdens of this character may offset to a large extent the financial burdens decreased in other ways.

Table 49.—Relation of the Retirement Allowance to the Amount Indicated as Necessary to Satisfy Minimum Needs

	Retirement Allowance											
Needs*.....	0–99	100–199	200–299	300–399	400–499	500–599	600–699	700–799	800–899	900–999	1000–over	Total
$1400 and over..	1	.....	.....	1	.....	.....	.....	.....	1	6	4	13
1300–1399.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2
1200–1299.....	.....	.....	.....	.....	2	3	2	2	1	2	1	13
1100–1199.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1000–1099.....	.....	.....	4	2	1	7	7	6	1	.....	.....	28
900–999.....	.....	1	.....	7	5	6	2	1	.....	.....	.....	22
800–899.....	.....	.....	1	2	1	6	6	1	.....	.....	.....	17
700–799.....	.....	1	2	2	5	6	1	.....	.....	.....	.....	17
600–699.....	3	18	24	27	13	6	.....	.....	.....	1	.....	92
500–599.....	1	3	6	16	.....	5	1	.....	.....	1	.....	33
400–499.....	1	13	23	11	2	.....	.....	.....	.....	.....	.....	50
300–399.....	4	25	20	1	.....	.....	.....	.....	.....	.....	.....	50
200–299.....	5	9	3	.....	.....	.....	.....	.....	.....	.....	.....	17
100–199.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
0–99.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1
Total.....	17	71	83	69	30	39	19	12	3	10	5	358

r=.76 P.E.= ±.015.
*Amounts indicated as necessary to satisfy minimum needs.

The relation between the amounts indicated as necessary to meet present minimum needs and the amount of retirement allowance is shown in Table 49. The value of r which is shown to be .76 indicates that this relationship is very high throughout the whole list. The fact that the correlation is so very close would seem to prove conclusively that the individual estimate of need was controlled very largely by the amount now received. Those whose allowances were small indicated relatively smaller amounts as necessary to satisfy their needs. Those whose retirement allowances were higher indicated much larger amounts, relatively, as necessary to meet their needs.

Table 50 shows the salary relationship to the retirement allowance. The value of r is .37 indicating that those with low salaries are, in general, satisfied with a less amount. On the other hand the remarks often contained criticisms of any tendency to provide higher salaried employes with a corresponding higher retirement allowance. Doubtless their point of view was either influenced by the amount which they were accustomed to receive or that they failed to appreciate or understand the point of view of those who were accustomed to living upon a higher salary.

Table 50.—Relation of Average Salary—Last Ten Years to Amount Indicated as Necessary to Satisfy Minimum Needs

Needs*	0–399	400–799	800–1199	1200–1599	1600–1999	2000–2399	2400–2799	2800–3199	3200–3599	3600–3999	4000–over	Total
$1400 and over	3	1	.....	.....	3	5	1	1	.....	1	.....	15
1300–1399	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	2
1200–1299	3	1	3	4	1	1	1	.....	.....	.....	.....	14
1100–1199	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1000–1099	1	8	12	6	4	.....	.....	.....	.....	.....	.....	31
900–999	2	4	8	6	2	1	.....	.....	.....	.....	.....	23
800–899	3	3	5	5	.....	1	.....	.....	.....	.....	.....	17
700–799	1	5	9	1	1	.....	.....	.....	.....	.....	.....	17
600–699	17	45	25	4	1	1	.....	.....	.....	.....	.....	93
500–599	3	20	3	2	.....	.....	1	.....	1	.....	.....	30
400–499	10	32	7	2	.....	.....	.....	.....	.....	.....	.....	51
300–399	13	33	4	.....	.....	.....	.....	.....	.....	.....	.....	50
200–299	8	7	1	2	.....	.....	.....	.....	.....	.....	.....	18
100–199	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
0–99	.....	.....	1	.....	.....	.....	4	1	1	1	.....	8
Total	66	160	79	32	12	10	7	2	2	2	.....	372

r=.37 P.E.= ±.03.
*Amounts indicated as necessary to satisfy minimum needs.

SUMMARY—CHAPTER VII

Retired employes have very little income other than retirement allowance. (Tables 40, 42, 43 and 44.)

There is some correlation between salary and income from personal saving but the value of r. is only .24 P.E. = ± .031. (Table 41.) There is also some correlation between salary and income from all sources other than retirement allowance. In this case the value of r. is .22 P.E. = ± .031. (Table 45.)

The chief reasons given by employes to account for the small amount of personal savings are:

a. Number of dependents
b. Small salaries
c. Education of children

Replies to the questionnaire show that a large number of retired employes are more or less dependent upon relatives or friends for support. (Table 47.)

The median amount indicated by the retired employes as necessary to provide minimum needs was $632. (Table 48.) There is remarkably high correlation between the amount so indicated and the retirement allowances actually received, the value of r. being .76. P.E. = ± .03. (Table 50.)

CHAPTER VIII

DEPENDENTS AND PRESENT OCCUPATION OF RETIRED EMPLOYES

MARITAL CONDITION

THE question of dependents has been given consideration in the various studies of the problem of retirement allowances.[1] Adequate provision in the nine state systems is decidedly lacking. However, all of the nine provide that the teachers' contributions together with interest accumulations shall be paid to the estate of

Table 51.—Distribution of Replies to the Questions Indicated

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
a. Were you married?																
Yes	89	29	7	125	52	6	1	59	63	5	4	72	204	40	12	256
No	7	131	5	193	1	28	1	30	1	4	0	5	9	213	6	228
Total Answers	96	210	12	318	53	34	2	89	64	9	4	77	213	253	18	484
No Answers	6	13	0	19	0	4	0	4	2	0	0	2	8	17	0	25
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
b. Is your husband or wife living?																
Yes	68	3	4	75	40	1	0	41	40	0	3	43	148	4	7	159
No	21	26	3	50	12	5	1	18	24	6	1	31	57	37	5	99
Total Answers	89	29	7	125	52	6	1	59	64	4	6	74	205	41	12	258
No Answers	13	194	5	212	1	32	1	34	2	3	0	5	16	229	6	251
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
c. How many children have you?																
1	14	9	4	27	7	3	...	10	9	1	1	11	30	13	5	48
2	16	5	...	21	12	...	...	12	15	3	1	19	43	8	1	52
3	15	2	1	18	7	...	...	7	12	...	1	13	34	2	2	38
4	5	...	...	5	5	...	...	5	4	...	...	4	14	...	...	14
5	8	...	...	8	4	...	...	4	6	1	1	8	18	1	1	20
6	6	...	1	7	5	...	...	5	1	...	...	1	12	...	1	13
7	4	...	...	4	2	...	...	2	4	...	...	4	10	...	...	10
8	6	1	...	7	2	...	...	2	4	...	...	4	12	1	...	13
9	2	...	...	2	...	...	...	...	...	...	...	...	2	...	...	2
10	2	...	...	2	...	...	...	...	...	...	...	...	2	...	...	2
11	1	...	...	1	...	...	...	...	1	...	...	1	2	...	...	2
12	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
Total	80	17	6	103	44	3	0	47	56	5	4	65	180	25	10	215
None or no Answers	22	206	6	234	9	35	2	46	10	4	0	14	41	245	8	294
Grand Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
Range				1–12				1–8				1–11				1–12
Median				3				3				3				3

[1]Illinois Pension Laws Commission, Report 1916; Report 1918-1919. Pension Funds of the City of New York, Report 1916.

the employe at his death. Three states[1], Maine, Wisconsin and Vermont, provide that the state's contribution together with accumulations shall also be returned to the estate in the event of death. This latter plan is the one recommended by the Carnegie Foundation.[2]

Table 52.—Ages of Living Wives or Husbands of Retired Pennsylvania School Employes

AGES OF LIVING SPOUSES	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
50 or less	1	...	1	2	1	...	...	1	...	...	...	...	2	...	1	3
51–52	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
53–54	1	...	...	1	2	...	...	2	...	...	...	...	3	...	...	3
55–56	2	...	...	2	1	...	...	1	...	...	...	...	3	...	...	3
57–58	1	...	...	1	2	...	...	2	1	...	...	1	4	...	...	4
59–60	8	...	...	8	4	...	...	4	...	...	...	...	12	...	...	12
61	...	...	...	...	1	...	...	1	1	...	...	1	2	...	...	2
62	...	...	...	...	1	...	...	1	2	...	...	2	3	...	...	3
63	11	...	...	11	...	...	...	...	4	...	...	4	15	...	...	15
64	3	...	1	4	2	...	...	2	2	...	...	2	7	...	1	8
65	6	1	...	7	4	...	...	4	1	...	...	1	11	1	...	12
66	4	1	1	6	2	...	...	2	...	...	...	...	6	1	1	8
67	6	...	...	6	...	...	...	...	4	...	...	4	10	...	...	10
68	3	...	1	4	4	...	...	4	5	...	...	5	12	...	1	13
69	3	...	...	3	...	...	...	...	4	...	...	4	7	...	...	7
70	5	...	...	5	5	...	...	5	3	...	...	3	13	...	...	13
71	2	1	...	3	1	...	...	1	2	...	...	2	5	1	...	6
72	4	...	...	4	3	...	...	3	2	...	1	3	9	...	1	10
73	3	...	...	3	...	...	...	...	2	...	...	2	5	...	...	5
74	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
75	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	1
76	...	...	...	...	1	...	...	1	3	...	...	3	4	...	...	4
77	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
78	1	...	...	1	...	1	...	1	1	...	...	1	2	1	...	3
79	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...	1
80 and over	1	1	...	2	...	...	...	...	...	...	1	1	1	1	1	3
Total	68	4	4	76	36	1	...	37	38	...	3	41	142	5	7	154
Range																50–80
Median																67.2
First Quartile																63.4
Third Quartile																70.8
Quartile Deviation																3.7

Table 51a shows that 484 of the 509 answered the question as to whether or not they were married. 256 answered "Yes," 228 answered "No." Of the 256, 204 were men and only 40 women. Twelve of those who indicated that they were married failed to indicate their sex.

Table 51b shows that 159 of the 256 husbands or wives were

[1]See Table 31, page 75.
[2]Carnegie Foundation, 17th Annual Report, 1922, page 125.

still living and, therefore, at least partially dependent upon the retired employe. Among the 159 only 4 were women. It is probable that many of the remaining 36 women entered the service after the death of their husbands.

In Table 52 the ages of living wives or husbands is shown. This is an important factor in determining the amount of an allowance which may be provided for widows in the event of death.

It will be noted that the median is 67.2 as compared with the median of 71.0 in Table 7, also that the value of Q in Table 52 is 3.7 as compared with 3.2 in Table 7.

Table 54.—Distribution of Replies According to the Number of Employes' Children who had Received an Education Beyond the Eighth Grade

NUMBER OF CHILDREN	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1	16	7	3	26	8	2	...	10	9	3	...	12	33	12	3	48
2	18	3	...	21	8	...	...	8	9	...	2	11	35	3	2	40
3	12	2	...	14	11	...	...	11	6	...	1	7	29	2	1	32
4	6	...	...	6	1	...	...	1	2	...	...	2	9	...	...	9
5	5	...	...	5	6	...	...	6	2	...	...	2	13	...	...	13
6	2	...	...	2	3	...	...	3	...	...	...	...	5	...	...	5
7	2	...	...	2	...	...	...	...	...	...	...	...	2	...	...	2
8	1	...	...	1	...	...	...	...	1	...	...	1	2	...	...	2
Total	62	12	3	77	37	2	...	39	29	3	3	35	128	17	6	151

NUMBER OF CHILDREN

In Table 51c it is shown that 215 of the 256 who were married had one or more children. The median number of children in each case was three. The total number in each family ranged from 1 to 12. The families of teachers appear to be approximately the same size as those of principals and superintendents, or janitors.

EDUCATION OF CHILDREN OF RETIRED EMPLOYES

Table 54 shows that only 151 of the 746 children of the retired employes had received any education beyond the eighth grade. Considering the size of the families indicated in Table 51c the economic condition was probably a large factor in accounting for this lack of education.

NUMBER OF CHILDREN NOW DEPENDENT

Table 53 shows that only 45 of the 746 children are now dependent upon the retired employe. This, of course, is what may reasonably be expected considering the age of retired employes. The importance of this fact in connection with this study is that the financial burden in so far as the children are concerned is very largely passed. The fact that the large majority of children are no longer dependent upon the employe would tend to lead to the conclusion that in order to maintain a similar standard of living the income after retirement need not be so great as during the period of active service.

Table 53.—Replies to the Question "How many Children are now Dependent upon you for Support?"

NUMBER OF CHILDREN NOW DEPENDENT	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Woman	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
1	8	1	1	10	9	...	...	9	7	2	...	9	24	3	1	28
2	7	...	...	7	5	...	...	5	2	...	...	2	14	...	...	14
3	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	1
4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	...	...	...	...	2	...	...	2	...	...	...	...	...	...	...	2
Total	15	1	1	17	16	0	0	16	10	2	...	12	41	3	1	45

DEPENDENTS AND AMOUNT OF RETIREMENT ALLOWANCE

By referring back to Tables 35 and 27, and also to Diagram 7 it will be found that men are receiving smaller retirement allowances than women. Tables 51, 53 and 54 indicate that the retired men have had, and still have, more dependents than the retired women.

PRESENT OCCUPATIONS

Many of the retired employes indicated that they had made special effort to secure employment of some kind after they had retired. They sadly report in most cases that they have been unsuccessful. However, 83 of them indicated the new work which they have taken up and the distribution of their reports upon

Table 55.—Distribution of Replies to the Question: Have you taken up a new occupation or Position? and, if so, what ?

	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
Yes	25	22	2	48	17	3	0	20	17	1	1	19	59	26	3	88
No	63	177	6	246	34	32	2	68	48	8	3	59	145	217	11	373
Total Answers	88	199	8	294	51	35	2	88	65	9	4	78	204	243	14	461
No Answers	14	24	4	43	2	3	0	5	1	0	0	1	17	27	4	48
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509
New Occupations																
1. Postmaster	1	...	...	1	1	...	...	1	...	...	...	...	2	...	...	2
2. Boarding house keeper	...	1	...	1	...	...	...	...	1	...	...	1	1	1	...	2
3. Coaching children under school age	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
4. Farm or garden or both	8	...	1	9	1	...	...	1	1	...	...	1	10	...	1	11
5. Raising chickens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Librarian	...	2	...	2	...	...	...	...	...	...	...	...	...	2	...	2
7. Insurance Agent	3	...	...	3	4	...	...	4	...	...	...	...	7	...	...	7
8. Housekeeper other than own family	...	3	1	4	...	1	...	1	...	...	...	...	...	4	1	5
9. Mission Work	...	1	...	1	...	1	...	1	...	...	...	...	...	2	...	2
10. Laborer	7	2	...	9	1	...	...	1	11	1	1	13	19	3	1	23
11. Tutoring	...	1	...	1	1	...	...	1	...	...	...	...	1	1	...	2
12. Conveyancing and Surveying	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
13. Teaching in Private School or other state	1	1	...	2	2	...	...	2	...	...	...	...	3	1	...	4
14. Agent for trees, seed, etc	2	1	...	3	2	...	...	2	2	...	...	2	6	1	...	7
15. Nursing	...	3	...	3	1	...	...	1	...	...	...	...	1	3	...	4
16. Reporting	...	1	...	1	...	...	...	...	...	...	...	...	...	1	...	1
17. Justice of the Peace	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
18. Clerical Work	...	1	...	1	3	...	...	3	...	...	...	...	3	1	...	4
19. Attendance officer	...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	1
20. Storekeeper or selling on street	...	...	...	...	...	...	...	...	2	...	...	2	2	...	...	2
21. Lecturing	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	1
Total	25	18	2	45	16	3	...	19	17	1	1	19	58	22	3	83
New Occupation not indicated	...	4	...	4	1	...	...	1	...	...	...	...	1	4	...	5
Grand Total	25	22	2	49	17	3	...	20	17	1	1	19	59	26	3	88

these items is shown in Table 55. Among the 83 there were 23 who reported that they have been serving as laborers[1]; 11 gave as their occupations, farming or gardening of some sort. Some grouped two or three things, such as farming, raising chickens, serving as agents for trees, and so forth. The table shows 21 different types of activities which were participated in by these retired employes.

[1]Of the twenty-three, thirteen indicated that they had been janitors.

Those who indicated that they were active in some way seemed to show a greater note of happiness in life than those who were not fortunate enough to secure employment of some kind.[1]

SUMMARY—CHAPTER VIII.

Approximately one-half of the retired employes were married. About 80 per cent of those married were men. (Table 51a.)

In about two-thirds of the marriages, the husband or wife of the retired employe was still living, but the number of children still dependent was very small—about 6 per cent. (Tables 51b, 51c, and 53.)

Only about 20 per cent of all the children of the retired employes had received any education beyond the eighth grade. (Table 54.)

Many retired employes have taken up new work since retirement. Many more have tried to obtain work but have not been successful. (Table 55.)

The Pennsylvania system inadequately provides for those dependent upon the retired employes. (Diagram 7, Tables 27 and 35.)

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[1]Cf. Carnegie Foundation, Nineteenth Annual Report, 1924, p. 21ff.

CHAPTER IX

AMENDMENTS

THE *retired employes were given an opportunity to indicate their preference in regard to certain amendments which had been proposed by the Pennsylvania State Education Association.*

ATTITUDE OF RETIRED EMPLOYES, ETC.

The preferences as shown by their replies to the questionnaire are indicated on Table 56. Some choice was indicated by 246 of the 509. Of these 246, 60 indicated that the removal of the $1,000 maximum annuity limit was their first choice; 126 indicated that their first choice was the amendment to provide that credit be given for the years of service rendered beyond the age of 62 years; only 16 specified as first preference the desire for service credit outside the public schools of Pennsylvania; 25 gave as their first choice, the granting of credit for all service rendered in the public schools of Pennsylvania regardless of the number or extent of the absences from the service; the remaining 19 wrote in suggestions of other amendments, all of which took the form of a suggestion for a minimum allowance—the amount suggested as minimum ranged from $300 to $600 per year. While their suggestions have some significance, the real issue in their minds has been more fully brought out in connection with the discussion of Table 48.[1]

In studying Table 56 it is important to observe the total number of times that each amendment appeared as some choice. The removal of the maximum limitation appeared on 119 different questionnaires; credit for outside service appeared 125 times; credit for all service regardless of the number or extent of the breaks in service appeared 146 times; whereas 219 of the 246 indicated a desire for the recognition of service beyond the age of 62 years.

[1]Page 104ff.

Table 56.—Preferences in Regard to Proposed Amendments as Indicated by Replies to the Questionnaire

PREFERENCES	Teachers				Principals and Superintendents				Other Service				Grand Totals			
	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total	Men	Women	No Sex Ind.	Total
a. Removal of the $1000 maximum annuity limit now provided																
1st choice	13	13	1	27	12	9	...	21	10	2	...	12	35	24	1	60
2nd choice	1	11	1	13	2	4	...	6	3	...	...	3	6	15	1	22
3rd choice	4	9	1	14	1	1	...	2	3	1	...	4	8	11	1	20
4th choice	1	10	...	11	2	1	2	5	1	...	...	1	4	11	2	17
Total times	19	43	3	65	17	15	2	34	17	3	...	20	53	62	5	119
b. Credit for service beyond the age of 62																
1st choice	16	68	5	89	11	11	1	23	13	1	...	14	40	80	6	126
2nd choice	17	24	...	41	10	8	...	18	10	1	...	11	37	33	...	70
3rd choice	...	6	1	7	2	1	1	4	1	...	...	1	3	7	2	12
4th choice	1	3	...	4	1	1	...	2	...	...	...	...	2	4	...	6
Total times	34	101	6	141	24	21	2	47	24	2	...	26	82	124	8	214
c. Credit up to maximum of 15 years for service rendered in schools other than the public schools of Pennsylvania																
1st choice	...	9	1	10	3	2	1	6	...	...	...	...	3	11	2	16
2nd choice	5	22	2	29	5	4	1	10	2	...	...	2	12	26	3	41
3rd choice	6	17	...	23	6	10	...	16	5	1	...	6	17	28	...	45
4th choice	2	12	...	14	1	2	...	3	5	1	...	6	8	15	...	23
Total times	13	60	3	76	15	18	2	35	12	2	...	14	40	80	5	125
d. Credit for all service rendered in the public schools of Pennsylvania regardless of number or extent of the breaks in that service.																
1st choice	5	13	...	18	2	4	...	6	1	...	...	1	8	17	...	25
2nd choice	5	11	3	19	7	8	1	16	8	1	...	9	20	20	4	44
3rd choice	8	9	2	19	9	4	1	14	6	...	...	6	23	13	3	39
4th choice	7	10	1	18	6	7	...	13	6	1	...	7	19	18	1	38
Total times	25	43	6	74	24	23	2	49	21	2	...	23	70	68	8	146
Number who indicated some choice	40	117	7	164	27	26	2	55	25	2	...	27	92	145	9	246
No Answers	62	106	5	173	26	12	...	38	41	7	4	52	129	125	9	263
Total	102	223	12	337	53	38	2	93	66	9	4	79	221	270	18	509

In Table 27 it was shown that only 25 of the 509 had received a salary in excess of $2,000 upon which the retirement allowance could have been based. It was interesting to note that 119 had approved of the amendment providing for the recognition of the larger salary in the determination of the retirement allowance. Considering the fact shown in Table 8, that the median age of retirement was 70, it is not difficult to understand how so large a number voted in favor of the recognition of credit beyond 62. Neither is it surprising that the largest number of first choices should have been indicated for this proposed amendment.

Table 57 shows the distribution of those affected by the amendment as shown by the records of the retirement board. In July,

1925, there were 972 employes on the superannuation retired list; 760 of them received greater retirement allowances because of the passage of the amendment allowing credit beyond the age of 62 years. Of this 760, 521 were teachers; 94 supervisors or superintendents; 145 were of the non-instructional service.

The removal of the $1,000 annuity limit benefited a comparatively small number—75 of the 972 or about 8 per cent. Of these

Table 57.—Number and Distribution of those on the Retired List who were Benefited by the 1925 Amendments According to the Official Records of the Retirement Board

	Teachers			Principals, Supts., etc.			Janitors, Cler. Assts. and Other Non-Instr. Ser.			Grand Totals		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
1. Credit beyond 62	150	371	52	61	33	94	128	17	145	339	421	760
2. Removal of 50% maximum	63	195	258	34	28	62	3	0		100	223	323
3. Removal of $2000 limit	15	28	43	22	5	27	5	0	5	42	33	75
4. Annulment of forfeiture for absence from service	11	77	88	0	0	0	6	1	7	17	78	95
5. Retirement prior to passing of law 1917: (S.B. 200)	95	153	248	...	...	...	...	...	...	...	...	...
6. Not benefited by any amendment	9	14	23	...	...	...	1	...	1	10	14	24

75, 43 were teachers, 27 were principals or superintendents, 5 were janitors.

The amendment in regard to absence from service as has been indicated in previous pages was not so sweeping as was proposed and stated in the questionnaire. However, 95 of those on the retired list have been benefited by the amendment as passed. Of these 95, 88 were teachers and 7 were from other service.

Another amendment which increased the retirement allowance of a great many was the amendment removing the 50 per cent maximum annuity limit. This amendment benefited particularly all of those who had given more than 40 years of service. 258 teachers were so benefited; 62 of the supervisory force and 3 from the group classified as "other service."

Another amendment by the passage of which Pennsylvania leads

the nine[1] states in its provisions for old teachers was the provision for granting an allowance to teachers who had retired prior to the enactment of the law of 1917. This amendment is fully described in Appendix II. Up to December, 1925, 248 old teachers had been benefited by this amendment.

Taking all the amendments together it is found that 948 of the 972 on the retired list in July, 1925, had been benefited by one or more of the amendments. The 248 former teachers[2] are not included in this number and, therefore, 1,196 retired employes were benefited. Of these 1,196, 903 were teachers.

THE EFFECTS OF THE AMENDMENTS

The median retirement allowance of those on the retired list was raised by the amendments from $340 to $393. This advance, while small in amount, is relatively a considerable increase, approximately 14 per cent.

OTHER AMENDMENTS SUGGESTED

Several other amendments which were not printed on the questionnaire were suggested by those who replied. The great majority of those who made such suggestions favored some sort of a minimum allowance. Among other suggestions offered were the following:

(1) "The annuity should be $1,000 regardless of position held." (This suggestion was made by one who had given 47 years of service and who was receiving a retirement allowance of $252.)

(2) "All annuities should be at least $50 per month. No person can possibly live on the small annuity allowed in my case." (Received $682 and gave 45 years of service.)

(3) "$20 a month or $240 per annum is not a just compensation

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[1]The State of Virginia and the City of Boston have somewhat similar provisions.
Massachusetts Pension Commission, 1925 Report, p. 51.

[2]Teachers who retired prior to the passage of the law of 1917 are classified by one of the 1925 amendments as "former teachers."

for 42½ years of service owing to low salary in rural districts."

(4) "The value of the dollar at the present time should be taken into consideration and minimum annuity should be $1,200."

(5) "Minimum for teachers in service prior to 1919 should be $500. Any teacher in service for 39 or more years with short terms, low salary, and no janitor, is ready to retire at 62 years."

(6) "I think the allowance is too small for the rural teacher who could teach only the minimum term for the minimum salary."

Many other comments were made in regard to minimum amounts.

There were also some other suggestions in regard to desirable amendments. Among them were the following:

(1) "I certainly think that teachers who were not teaching after salaries were raised ought to have a high rate."

(2) "Am very desirous of getting a little credit for service outside of state. Low salary sent me away. Poor health brought me back."

(3) "Comparing other pensions, my allowance for long, hard and faithful work, I think shameful."

(4) "Age in years does not determine efficiency. Cruel to be turned out at 70 if able to do satisfactory service, and still more cruel if not allowed to substitute."

(5) "I do not believe it fair that those who received the highest salary should get the highest benefit. Those who are in greatest need should get more."

The comments above quoted are fairly representative of the hundreds that were submitted.

As was shown in Table 49 there is a very high correlation between the retirement allowance and the amount estimated as necessary to satisfy the minimum needs. In general those who objected to the removal of the $1,000 maximum annuity limit were those who received very small retirement allowances and to whom it was quite natural that $1,000 should seem very large. The fact, however, that there were 119 who favored the removal of that limit indicates a strong tendency in the thoughts of those

on the retired list that the retirement allowances should not be bounded by artificial limits, but should bear a similar ratio to the salaries received in active service.

SUMMARY—CHAPTER IX

The retired employes favor the following amendments:

a. Removal of the $1,000 maximum annuity limit.[1] (Table 56.)
b. Granting of credit for service rendered after the age of 62.[1] (Table 56.)
c. Credit for some "outside service." (Table 56.)
d. Credit for all service regardless of continuity.[2] (Table 56.)
e. A minimum or some equivalent to offset the low salaries of the rural districts and the decreased purchasing power of money.

SUMMARY—PART II

1. The employes now retired fulfilled the educational requirements of their generation of service. (Chapter VI.)

2. The present retirement allowance inadequately meets living costs. (Chapters VII and VIII.)

3. The amount of income from all sources other than retirement allowance is very small. (Chapter VIII.)

4. The provision for dependents in the event of death of school employes in Pennsylvania is about half of that recommended by the Carnegie Foundation, and the Committee on Retirement Allowances of the National Education Association. Maine, Vermont, and Wisconsin provide that the state's share of contributions as well as the teacher's share shall be paid to the estate in all cases where the teacher dies during the period of active service. (Chapter IX.) (See also Chapter V.)

5. The retired employes favor the amendments mentioned in the questionnaire and also some amendments which will enable them to meet the increased cost of living. (Chapter X.)

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[1]Corrected by amendment of 1925. This study, started prior to the Legislative session of 1925, contains some material which was made available to those who were urging the amendments and assisted in their passage.

[2]Partially corrected by amendments of 1925.

SUMMARY

The facts brought out in the preceding chapters may be summarized as follows:

1. The present retirement allowance is inadequate.[2] (Chapters II, VII, VIII.)
2. Certain practices tend to retain in the service those who have become unfit, namely,—
   a. The minimum age limit of 62 years. (Chapter II.)
   b. The requirement of 40 years of service to be eligible for half salary. (Chapter III.)
   c. No provision for "outside credit." (Chapter III.)
   d. Low salaries. (Chapter IV and VIII.)
   e. The determination of "final salary" combined with the recent salary increases. (Chapters IV and X.)
   f. Forfeitures in cases of extended absence.[2] (Chapter III.)
   g. No salary above $2,000 counted in determining "final salary."[1] (Chapter IV and Chapter X.)
3. Certain practices are not as attractive to employes as those recommended by experts in this field and now practiced in other States, namely,—
   a. Minimum age limit of 62 years as compared with 50 to 60 in other states. (Chapter II.)
   b. Requirement of 40 years of service to be eligible for half salary as compared with a median of 30 years for other states. (Chapter III.)
   c. No provision for outside credit as compared with a median of 10 years for other states. (Chapters III and X.)
   d. "Final Salary" determines on the basis of last ten years of service, as compared with the basis of last five years for certain other states or with the basis of accumulations recommended by the Carnegie Foundation. (Chapters IV and X.)
   e. No minimum retirement allowance as compared with $300 to $500 in other states. (Chapter VII.)
   f. Forfeitures as compared with the non-forfeiture provision recommended by the Carnegie Foundation and now practised in Maine, Vermont and Wisconsin.[3] (Chapter III.)

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[1]Corrected by amendment of 1925. This study, started prior to the Legislative session of 1925, contains some material which was made available to those who were urging the amendments and assisted in their passage.

[2]Partially corrected by amendments of 1925.

g. Withdrawal benefits approximately half of those recommended and now practised in Maine, Vermont and Wisconsin. (Chapter V.)

h. Provision for dependents in the event of death approximately half of those recommended and now practiced in Maine, Vermont, and Wisconsin. (Chapters V and IX.)

i. No allowance for credit beyond the age of 62 as compared with no such limit in other sound systems.[1] (Chapter III.)

j. No salary above $2,000 used in determining retirement allowances as compared with no such limit in other sound systems.[1] (Chapter VI.)

4. The employes now retired fulfilled the educational requirements of their generation of service. (Chapter VI.)
5. Income other than retirement allowance very small. (Chapter VIII.)
6. Obligations assumed by Pennsylvania fulfilled thus far. (Chapter V.)

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[1]Corrected by amendments of 1925. This study, started prior to the Legislative session of 1925, contains some material which was made available to those who were urging the amendments and assisted in their passage.

APPENDIX I

ARTICLE LVI—PENNSYLVANIA SCHOOL CODE

TEACHERS' RETIREMENT SYSTEM

Note. See Article XXIV.

(A) DEFINITIONS

(5601) The following words and phrases as used in this act, unless a different meaning is plainly required by the context, shall have the following meanings:—

(1) "Retirement system" shall mean the arrangement for the payment of retirement allowances under the provisions of this act.

(2) "Retirement Association" shall mean the employes' retirement association provided for in section three of this act.

(3) "Retirement Board" shall mean the employes' retirement board provided for in section four of this act.

(4) "Superintendent of Public Instruction" shall mean the Superintendent of Public Instruction of the Commonwealth of Pennsylvania.

(5) "Public School" shall mean any class, school, high school, normal school, training school, vocational school, truant school, parental school, and any or all classes or schools within the State of Pennsylvania, conducted under the order and superintendence of the Department of Public Instruction of the Commonwealth of Pennsylvania and of a duly elected or appointed board of public education, board of school directors, or board of trustees, of the Commonwealth, or of any school district or normal school district thereof, and shall include the offices of the State Department of Public Instruction and the State Board of Education.

Definitions of certain words and phrases as used in this act.

(6) "Employer" shall mean the Commonwealth, school district, normal school district, board, or other committee by which the employe is paid.

(7) "Employe" shall mean any teacher, principal, supervisor, supervising principal, county superintendent, district superintendent, assistant superintendent, any member of the staff of the State normal schools, or of the staff of the State Department of Public Instruction, or of the staff of the State Board of Education, or any clerk, stenographer, janitor, attendance officer, or other person engaged in any work concerning or relating to the public schools of this Commonwealth, or in connection therewith, or under contract or engagement to perform one or more of these functions: Provided, That no person shall be deemed an employe, within the meaning of this act, who is not regularly engaged in performing one or more of these functions as a full-time occupation, outside of vacation periods. In all cases

of doubt the retirement board shall determine whether any person is an employe as defined in this act:

Amendment of April 21, 1921, P. L. 245, Sec. 1 and of April 6, 1925, P. L. 109

And provided further, That those employes of the Department of Public Instruction who are members of or are entitled to membership in the retirement system herein established may withdraw from the system, and be entitled to reimbursement of moneys which they have paid in, by so electing in writing filed with the Retirement Board on or before the first day of July, one thousand nine hundred and [twenty-one] twenty-five. After said date all new employes in the Department of Public Instruction shall be members of said system, unless they elect otherwise in writing filed with the Retirement Board within [thirty days] one year after beginning their employment.

(8) "Present Employe" shall mean any employe, as defined in paragraph seven of this section, employed in any capacity in connection with the public schools at the time this bill becomes a law, and any employe who was employed prior to such time and who shall become a contributor [within three years from the date of expiration of such employment] *subject to the conditions provided in clause two of section twelve of this act.*

Amendment of April 27, 1925 P. L. 207

(9) "New entrant" shall mean any employe, as defined in paragraph seven of this section, appointed or elected, or contracting or otherwise legally engaging, to serve in any capacity in connection with the public schools after this bill becomes a law.

(10) "Contributor" shall mean any person who has an account in the annuity savings fund.

(11) "Beneficiary" shall mean any person in receipt of retirement allowance or other benefit as provided in this act.

(12) "School Service" shall mean any service as an employe as defined by paragraph seven of this section.

(13) "Prior Service" shall mean all school service completed not later than the thirtieth day of June, nineteen hundred nineteen.

(14) "School Year" shall mean the official school year of the school district in which an employe is employed.

(15) "Disability Retirement" shall mean retirement as defined in section twelve of this act.

(16) "Superannuation Retirement" shall mean retirement as defined in section thirteen of this act.

(17) "Final Salary" shall mean the average annual salary [not exceeding two thousand dollars] earnable by a contributor as an employe for the ten years of service immediately preceding retirement.

(18) "Accumulated Deductions" shall mean the total of the amounts deducted from the salary of a contributor and credited to his or her indi-

vidual account in the annuity savings fund, together with the regular interest thereon.

(19) "Regular Interest" shall mean interest at four per cent. per annum, compounded annually.

(20) "State Annuity" shall mean payments for life, derived from contributions made by the Commonwealth of Pennsylvania as provided in this act.

(21) "Employe's Annuity" shall mean payments for life, derived from contributions made by a contributor as provided in this act.

(22) "Retirement Allowance" shall mean the State annuity plus the employe's annuity.

(23) "State Annuity Reserve" shall mean the present value, computed on the basis of such mortality tables as shall be adopted by the retirement board, with the regular interest, of the future payments to be made on account of any State annuity granted, and based on contributions made by the Commonwealth of Pennsylvania.

(24) "Employe's Annuity Reserve" shall mean the present value computed on the basis of such mortality tables as shall be adopted by the retirement board, with regular interest, of the future payments to be made on account of any employe's annuity granted, and based on the accumulated deductions of the contributor.

(25) "Expense Fund" shall mean the fund provided for in paragraph number two in section eight of this act.

(26) "Contingent Reserve Fund" shall mean the fund provided for in paragraph number three in section eight of this act.

(27) "State Annuity Reserve Fund" shall mean the fund provided for in paragraph number four in section eight of this act.

(28) "State Annuity Reserve Fund Number Two" shall mean the fund provided for in paragraph number five in section eight of this act.

(29) "Employe's Annuity Savings Fund" shall mean the fund provided for in paragraph number six in section eight of this act.

(30) "Employe's Annuity Reserve Fund" shall mean the fund provided for in paragraph number seven in section eight of this act.

(B) RETIREMENT SYSTEM

(5602) The retirement system shall be established on the first day of July, nineteen hundred nineteen. Date of Establishment of system

(C) EMPLOYES' RETIREMENT ASSOCIATION

(5603) An employes' retirement association is hereby organized the membership of which shall consist of the following:— Membership

1. All present employes,—*including employes in the Pennsylvania Institution for the Instruction of the Blind, Overbrook, Philadelphia, Penn-* Present employes, etc.

Payment of amount equal to accumulated deductions.

sylvania; the Western Pennsylvania Institution for the Blind, Pittsburgh, Pennsylvania; the Pennsylvania Institution for the Deaf and Dumb, Mount Airy, Philadelphia, Pennsylvania; and the Western Pennsylvania Institution for the Instruction of the Deaf and Dumb, Wilkinsburg, Pennsylvania;— except those specifically excluded by paragraph three of this section, who, by written application to the Superintendent of Public Instruction, shall elect before the first day of July, nineteen hundred and *twenty-four* [nineteen] to be covered by the retirement systm: *Provided that such employe shall, at the time of making such application, pay into the employes' annuity savings fund, as provided for in paragraph number six of section eight of this act, an amount equal to what would have been at that date the accumulated deductions from the salary of such employe had the election to be covered by the retirement system been made prior to the first day of July, nineteen hundred and nineteen.*

Time to elect to be covered by system Proviso

Amended June 29, 1923 P. L. 935.

2. All new entrants, except those specifically excluded by paragraph three of this section.

3. Present employes who are members, and new entrants who become members, of a retirement system, maintained under the laws of the Commonwealth from appropriations or contributions made wholly or in part by any employer, and existing at the time this bill becomes a law, shall be excluded from membership in this retirement association. But should two-thirds of all the members participating in any such retirement system apply for membership in the retirement association, by a petition duly signed and verified, approved by their employer, and filed with the retirement board, all the persons included in the membership of such retirement system shall become members of the retirement association at such time within three months after the filing of such petition, as the retirement board shall designate. Thereupon the retirement system of which they were members at the time they were included in the retirement association provided by this act shall be dissolved and discontinued as follows:—

Conditions under which members of local retirement associations may become members of the State Retirement Association.

The payment of retirement allowances or other benefits which were in effect at the time of such discontinuance shall become an obligation of the employer, shall be continued as formerly provided by such retirement system, and shall be paid out of such moneys, excepting further contributions of members, as were formerly available for such payment, and the employer shall appropriate for such purpose such other moneys as shall be required.

All present assets of such retirement system at the time of its discontinuance shall be transferred to the employer, to be held and invested as a trust fund and disbursed only in payment to the beforementioned retired members, except that if the amount of such present assets exceed the present value of the future retirement allowances or other benefits of such retired mem-

bers, computed on the basis of such tables as the retirement board shall have adopted for similar classes of annuitants and of regular interest, the amount of the excess shall thereupon be transferred to State annuity reserve fund number two. Upon the retirement of any contributor of the retirement association established by this act, who has not received back any contributions which he or she made to such discontinued retirement system, there shall be paid from State annuity reserve fund number two into employes' annuity reserve fund the amount of such contributions, and he or she shall receive therefor such annuity or other benefit purchasable therewith as he or she may elect, in addition to the other benefits provided by this act.

(D) THE RETIREMENT BOARD

Section 408 Administrative Code

5604-A. Public School Employes' Retirement Board.—The Public School Employes' Retirement Board shall consist of the Superintendent of Public Instruction, who shall be chairman thereof, the State Treasurer, one member who shall be appointed by the Governor, three members of the School Employes' Association elected from among their number in a manner to be approved by the Superintendent of Public Instruction, the State Treasurer, and the member of the Retirement Board appointed by the Governor, and one member, not an officer or employe of the State, who shall be elected by the board.

A vacancy occurring during a term shall be filled for the unexpired term by the appointment or election of a successor in the same manner as his or her predecessor.

Of the members of the Public School Employes' Retirement Board, the member who is appointed by the Governor shall serve until his successor is appointed. The members elected by the School Employes' Association shall be elected for terms of three years. The member elected by the board shall be elected annually to serve for a term of one year.

The members of the board elected by the School Employes' Association shall not suffer any loss of salary or wages through serving on the board.

Public School Employes' Retirement Board

Section 1308 Administrative Code.

5604-B. Subject to any inconsistent provisions in this act contained, the Public School Employes' Retirement Board shall continue to exercise the powers and perform the duties by law vested in and imposed upon the said Retirement Board under the act, approved the eighteenth day of July, one thousand nine hundred and seventeen (Pamphlet Laws, one thousand forty-three), entitled "An act establishing a public school employes' retirement system, and creating a retirement board for the administration thereof; establishing certain funds from contributions by the Commonwealth and contributing employes, defining the uses and purposes thereof and the manner of payments therefrom, and providing for the guaranty by the Commonwealth of certain of said funds; imposing powers and duties upon boards having

the employment of public school employes, exempting annuities, allowances, returns, benefits, and rights from taxation and judicial process; and providing penalties," its amendments and supplements.

Members to serve without pay.

2. The members of the retirement board shall serve without compensation, but shall be reimbursed from the expense fund for any necessary expenditures, and no contributor shall suffer loss of salary or wages through serving on the retirement board.

The Retirement Board to appoint and fix compensation of its employes.

3. The retirement board shall elect, from its membership, a chairman, and shall appoint a secretary, an actuary, and such medical, clerical, and other employes as may be necessary.

4. The compensation of all persons employed by the retirement board shall be fixed by said retirement board.

Regulations for administration to be established.

5. Subject to the limitations of this act and of law, the retirement board shall, from time to time, establish rules and regulations for the administration of the funds created by this act and for the transaction of its business.

Data to be kept

6. The retirement board shall keep, in convenient form, such data as shall be necessary for actuarial valuation of the various funds created by this act.

Actuarial investigation to be made periodically and rates of contribution to be determined.

7. In the years nineteen hundred twenty-one and nineteen hundred twenty-four, and in every fifth year thereafter, the actuary of the retirement board shall make an actuarial investigation into the mortality and service experience of the contributors and beneficiaries as defined in this act, and shall make a valuation of the various funds created by this act; and, on the basis of such investigation and valuation, the retirement board shall—

(a) Adopt for the retirement system one or more mortality tables, and such other tables as shall be deemed necessary;

(b) Certify the rates of deductions from salary necessary to pay the annuities authorized under the provisions of this act; and

(c) Certify the rates of contribution, expressed as a percentage of salary of new entrants at various ages, which shall be made by the Commonwealth to the contingent reserve fund.

8. Immediately after the passage of this act, the actuary of the retirement board shall make such investigation of the mortality service and salary experience of the employes of the public schools as he shall recommend and the retirement board shall authorize, for the purpose of determining upon the proper tables to be prepared and submitted to the retirement board for adoption. On the basis of such investigation and recommendation the retirement board shall adopt such tables and certify such rates as are required

in subsections, a, b, and c of paragraph seven, immediately preceding. On the basis of such tables the actuary of the retirement board shall, immediately after the first day of July, nineteen hundred and nineteen, make a valuation of the various funds created by this act.

Annual report to be published.

9. The retirement board shall publish annually a report showing the condition of the various funds created by this act, and setting forth such other facts, recommendations, and data as may be of use in the advancement of knowledge concerning employes' pensions and annuities, and said retirement board shall submit said report to the Governor of the Commonwealth of Pennsylvania; and shall file copies thereof in the offices of the State Department of Public Instruction, of the State Insurance Department, and of each employer, for use of the employes and the public.

Oath of office.

10. Each member of the retirement board shall take an oath of office that he or she will, so far as it devolves upon him, diligently and honestly administer the affairs of said retirement board, and that he or she will not knowingly violate or wilfully permit to be violated any of the provisions of law applicable to this act. Such oath shall be subscribed by the member making it, and certified by the officer before whom it is taken, and shall be immediately filed in the office of the Secretary of State.

Records to be open to inspection.

11. The retirement board shall keep a record of all its proceedings, which shall be open to inspection by the public.

12. The retirement board shall perform such other functions as are required for the execution of the provisions of this act.

(E) CORPORATE POWERS

(5605) For the purposes of this act, the retirement board shall possess the powers and privileges of a corporation. The Attorney General of the Commonwealth of Pennsylvania shall be the legal adviser of said retirement board.

(F) MANAGEMENT OF THE FUNDS

Funds to be managed and invested by Retirement Board.

(5606) The funds created by this act shall be managed as follows:

1. The members of the retirement board shall be the trustees of the several funds created by this act, and shall have exclusive control and management of the said funds and full power to invest the same; subject, however, to all the terms, conditions, limitations, and restrictions imposed by this act upon the making of investments; and subject, also, to the terms, conditions, limitations, and restrictions imposed by law upon savings-banks in the making and disposing of their investments; and, subject to like terms, conditions, limitations, and restrictions, said trustees shall have full power to hold, purchase, sell, assign, transfer, or dispose of any of the securities

and investments in which any of the funds created by this act shall have been invested, as well as of the proceeds of said investments and of any moneys belonging to said funds.

"Regular Interest" to be allowed.

2. The retirement board shall annually allow regular interest on the mean amount for the preceding year in each of the funds created in accordance with the provisions of this act, with the exception of the expense fund. The amount so allowed shall be due and payable to such funds, and shall be annually credited thereto by the retirement board.

State Treasurer to be custodian of the funds.

3. The treasurer of this Commonwealth shall be the custodian of the several funds created by this act.

Method of payments from the funds.

4. All payments from the funds created by this act shall be made by the State Treasurer only, upon warrant signed by the chairman of the retirement board and countersigned by the secretary of the retirement board; and no warrant shall be drawn except by order of the retirement board, duly entered in the record of its proceedings.

Authority to keep an available fund on deposit.

5. For the purpose of meeting disbursements for annuities and other payments in excess of the receipts, there may be kept an available fund, not exceeding ten per centum of the total amount in the several funds created by this act, on deposit in any bank in this Commonwealth organized under the laws thereof or under the laws of the United States, or with any trust company incorporated by any law of this Commonwealth; provided said bank or trust company shall furnish adequate security for said funds; and provided that the sum so deposited in any one bank or trust company shall not exceed twenty-five per centum of the paid up capital and surplus of said bank or trust company.

Security to be furnished by the bank of deposit

No trustee or person connected with the Retirement Board to have any interest whatsoever in the funds of the System.

6. Except as herein provided no trustee or any person connected with the retirement board shall have any interest, direct or indirect, in the gains or profits of any investment made by the retirement board; nor, as such, directly or indirectly, receive any pay or emoluments for his or her service. And no trustee or person connected with said retirement board, directly or indirectly, for himself or herself, or as an agent or partner of others, shall borrow any of its funds or deposits, or in any manner use the same, except to make such current and necessary payments as are authorized by the board of trustees; nor shall any trustee or person connected with said retirement board become an endorser or surety, or become in any manner an obligor, for moneys loaned by or borrowed of said retirement board.

Prospective employes to be notified concerning Ret. System.

(5607) Each employer shall, before employing any person to whom this act may apply, notify such person of his or her duties and obligations under this act, as a condition of his or her employment.

2. During September of each year each employer shall certify to the retirement board the name of all employes to whom this act applies.

Retirement Board to be kept informed of changes.

3. Each employer shall, on the first day of each calendar month, notify the retirement board of the employment of new employes, removals, withdrawals, and changes in salary of employes, that shall have occurred during the month preceding.

4. Under the direction of the retirement board, each employer shall furnish such other information as the board may require in the discharge of duties.

Deductions from salaries of contributors to be made by employers.

5. Each employer shall cause to be deducted on each and every pay-roll of a contributor, for each and every pay-roll period subsequent to June thirtieth, nineteen hundred nineteen, such per centum of the total amount of salary earnable by the contributor in such pay-roll period as shall be certified to said employer by the retirement board as proper, in accordance with the provisions of this act. [No deductions shall be made from that part of the salary earnable by any contributor which is at a rate in excess of two thousand dollars per annum.] In determining the amount earnable by a contributor in a pay-roll period, the retirement board may consider the rate of salary payable to such contributor on the first day of each regular pay-roll period as continuing throughout such pay-roll period, and it may omit salary deductions for any period less than a full pay-roll period in cases where the employe was not a contributor on the first day of the regular pay-roll period; and, to facilitate the making of the deductions, it may modify the deduction required of any contributor by such amount as shall not exceed one tenth of one per centum of the salary upon the basis of which the deduction is to be made. The deductions provided herein shall be made, notwithstanding that minimum salaries provided for by the laws, ordinances, resolutions, or other acts of the Commonwealth, or of any other employer, shall be reduced thereby. Each employer shall certify to the treasurer of said employer, on each and every pay-roll, a statement as voucher for the amounts so deducted, and shall send a duplicate of such statement to the secretary of the retirement board.

Amendment of April, 1925

Amounts deducted to be transmitted to the Retirement Board.

6. The treasurer of each employer, on receipt from the employer of the voucher for deductions from the salaries of employes, provided in paragraph five of this section, shall transmit monthly, or at such times as the retirement board shall designate, the amounts specified in such voucher to the secretary of the retirement board. The secretary of the retirement board, after making a record of all such receipts, shall pay them to the treasurer of the Commonwealth, for use according to the provisions of this act.

All portions stricken out by amendments are indicated by [ ]

7. Each employer shall keep such records as the retirement board may require.

(G) FUNDS

Funds created

(5608) The funds hereby created are,—the expense fund, the contingent reserve fund, State annuity reserve fund, State annuity reserve fund number two, the employes' annuity savings fund, and the employes' annuity reserve fund.

Expense fund.

2. The expense fund shall consist of such amounts as shall be paid by the Commonwealth, on the basis of estimates submitted by the retirement board, to defray the expenses of the administration of this act, exclusive of the payment of retirement allowances and of the other benefits provided for in this act.

Contingent reserve fund.

3. In the month of July, nineteen hundred twenty, for a period covering the twelve months next preceding, and semi-annually thereafter, covering the six months next preceding, the Commonwealth of Pennsylvania shall pay into a fund to be known as the contingent reserve fund, on account of each new entrant who was a contributor for one or more months of such respective periods, such amount as shall be certified by the retirement board as necessary to provide by such method of payment, during the prospective active service of such new entrant, the State annuity reserve required at the time of retirement for the disability or superannuation State annuity allowable by said Commonwealth, under the provisions of this act. The amount so certified to by retirement board shall be computed to bear a ratio to the salary earnable by such new entrant during the period for which the amount is certified, which shall remain constant during his or her entire period of prospective active service, and shall be based on such mortality and other tables as shall be adopted by the retirement board, and on regular interest.

State annuity reserve fund.

4. Upon the retirement of a new entrant an amount equal to his or her State annuity reserve shall be transferred from the contingent reserve fund into a fund to be known as State annuity reserve fund. His or her State annuity shall be paid from said State Annuity reserve fund. Should said new entrant be subsequently restored to active service, his or her State annuity reserve shall thereupon be transferred from State annuity reserve fund to the contingent reserve fund. Should the State annuity of any such new entrant be otherwise reduced or discontinued, in accordance with the provisions of this act, his or her State annuity reserve, or such proportionate part of his or her State annuity reserve as corresponds to the amount of the reduction in his or her State annuity, shall be transferred from State annuity reserve fund to the contingent reserve fund.

State annuity reserve fund number two.

5. Beginning with the month of July, nineteen hundred nineteen, and continuing until the accumulated reserve equals the present value, as computed by the actuary of the retirement board and approved by the retirement board, of all State annuity payments thereafter payable by the Commonwealth on account of present employes, then retired or to be retired on State annuities as provided in this act, the said Commonwealth shall pay semi-annually into a fund, to be known as State annuity reserve fund number two, an amount equal to two and eight-tenths (2.8) per centum of the total compensation paid to all contributors for service during the preceding school year, and in every case an amount at least three per centum greater than the second preceding semi-annual payment: *Beginning with the month of July nineteen hundred twenty-five the Commonwealth shall pay semi-annually into State Annuity Reserve Fund Number Two an amount equal to two* (2) *per centum of the total compensation paid to all contributors for service during the preceding school year.* Provided that in every case the amount shall be sufficient, when combined with that in the fund, to provide the pensions payable by the Commonwealth during the half-year then current to present employes, then retired or to be retired as provided in this act. Upon the retirement of a present employe, his or her State annuity shall be paid from State annuity reserve fund number two.

Amendment of April 27, 1925 P. L. 207

Employes' annuity savings fund.

6. The employes' annuity savings fund shall consist of the accumulated deductions from the salaries of contributors, made under such rules and regulations as the retirement board shall prescribe, as follows:—

Amendment of April, 1925

From the salary of each employe who is a contributor there shall be deducted such per centum of his or her earnable salary, [not exceeding two thousand dollars per annum,] as shall be computed to be sufficient, with regular interest, to procure for him or her, on superannuation retirement at age sixty-two, an employe's annuity equal to one one-hundred-sixtieth (1-160) of his or her final salary for each year of service after the thirtieth day of June, nineteen hundred nineteen; except that, if the deduction so computed shall exceed five per centum of his or her earnable salary, and the employe shall so elect, there shall be deducted five per centum of his or her earnable salary; And further provided, That a beneficiary restored to school service shall not be required to contribute at a per centum rate of his or her earnable salary which is greater than the per centum thereof which he or she was required to contribute prior to his or her retirement. The rate per centum of said deduction from salary shall be based on such mortality and other tables as the retirement board shall adopt, together with regular interest, and shall be computed to remain constant during the prospective school service of the contributor.

All portions stricken out by amendments are indicated by [ ]

All portions added by amendments are indicated by *italics*

Employes' annuity reserve fund.

7. Upon the retirement of a contributor his or her accumulated deductions shall be transferred from the employes' annuity savings fund to a fund to be known as the employes' annuity reserve fund. His or her employes' annuity shall be paid out of said employes' annuity reserve fund. Should said contributor be subsequently restored to active service, his or her employes' annuity reserve shall thereupon be transferred from the employes' reserve fund to the employes' annuity savings fund.

8. No contributor shall be required to continue to contribute to the employes' annuity savings fund after he or she shall have become eligible for superannuation retirement; all contributions made thereafter to said fund shall be voluntary.

Methods by which contributions shall be made by the employers.

(5609) The Commonwealth of Pennsylvania shall be reimbursed to the extent of one-half of the amount paid by the Commonwealth into the contingent reserve fund and the State annuity reserve fund number two on account of employes of each other employer, by payments into its treasury made directly by such employer, or indirectly from moneys otherwise belonging to such employer. To facilitate the payment of amounts due from the treasurer of any employer to the treasurer of the Commonwealth, on account of the retirement system, and to permit the exchange of credits between the treasurer of the Commonwealth and the treasurer of any employer, the State Superintendent of Public Instruction and the State Treasurer are hereby authorized and empowered to cause to be deducted, and paid into or retained in the State Treasury, from the amount of any moneys due to any employer on account of any appropriation for schools or other purposes, the amount due to the State Treasurer from such employer, in accordance with the provisions of this act. Corresponding amounts, which would be otherwise transferred to the treasury of the Commonwealth from the treasurer of such employer, may be credited to the accounts of the employer to which the moneys withheld by the Commonwealth were payable.

(H) STATE GUARANTY

Maintenance of the system an obligation by the State.

(5610) Regular interest charges payable, the creation and maintenance of reserves in the contingent reserve fund, and the maintenance of employes' annuity reserves and State annuity reserves as provided for in this act, and the payment of all retirement allowances and other benefits granted by the retirement board under the provisions of this act, are hereby made obligations of the Commonwealth of Pennsylvania. All income, interest, and dividends derived from deposits and investments authorized by this act shall be used for the payment of the said obligations of the Commonwealth. The retirement board shall prepare, and submit to the Legislature, on or before the thirty-first day of January in each odd-numbered year, an itemized estimate of the amounts necessary to be appropriated by the Common-

Necessary appropriation to be made by Legislature.

wealth to the various funds to complete the payment of the said obligations of said Commonwealth accruing during the biennium beginning July first of the same year; and it shall be the duty of said Legislature to make an appropriation sufficient to provide for such obligations of the Commonwealth; and the amounts so appropriated shall be included in the general appropriation bill, and shall be paid by the Treasurer of the Commonwealth into the various funds created by this act.

Note. The remainder of this section is obsolete.

(I) SERVICE ALLOWANCE

Credit for service to be allowed. Certification of service to be issued to employes.

Amendment of April, 1925.

(5611) In computing the length of service of a contributor for retirement purposes, under the provisions of this act, full credit shall be given to each contributor by the retirement board for each school year of service as an employe, as defined in section one paragraph seven of this act. *And for each school year for which credit is not otherwise provided for in this Act and during which the Contributor was a member of the American Expeditionary Force in the World War or in activities connected therewith approved by the retirement board.* Under such rules and regulations as the retirement board shall adopt, each employe shall file with the retirement board a detailed statement of such service rendered by him or her. As soon as practicable thereafter the retirement board shall verify such statement as to prior service, and shall issue to each employe a certificate certifying to the aggregate length of his or her prior service. Such certificate shall be final and conclusive as to his or her prior service, unless thereafter modified, (a) by the retirement board, upon application by employe; (b) by the State Superintendent of Public Instruction, upon application by the employe or by the retirement board; provided such application for modification be made to said State Superintendent of Public Instruction within one year after the issuance of a certificate or a modified certificate by the retirement board. A certificate for prior service issued to a present employe shall certify the total number of completed years of prior service allowance for said present employe to and including the thirtieth day of June, nineteen hundred nineteen. The time during which an employe is absent without pay shall not be counted in computing the prior service, the total service, or the average salary of a contributor, unless allowed by the employer by whom said contributor was employed at the time said leave of absence was granted, and, further, unless said allowance is approved by the retirement board.

(J) WITHDRAWAL

Payments upon withdrawal.

(5612) Should a contributor, by resignation or dismissal, or in any other way than by death or retirement, separate from the school service, or should such contributor legally withdraw from the retirement system,

Accumulated deductions.

Annuity or deferred annuity.

he or she shall be paid on demand (a) the full amount of accumulated deductions standing to the credit of his or her individual account in the annuity savings fund, or, in lieu, thereof, should he or she so elect, (b) an annuity or a deferred annuity, which shall be the actuarial equivalent of said accumulated deductions. His or her membership in the retirement association shall thereupon cease.

Return to employment within five years.

Amended June 28, 1923, P. L. 902.

As amended April 27, 1925, P. L. 207.

2. Should an employe, so separated from the school service, return within [three] *five* years, and restore to the annuity savings fund his or her accumulated deductions as they were at the time of his or her separation, the annuity rights forfeited by him or her at that time shall be restored. *Each employe who separated from school service prior to the first day of July one thousand nine hundred and twenty-five and who subsequently returned or shall return to school service prior to July first one thousand nine hundred and twenty-six after more than five years' absence shall at retirement for superannuation be entitled to have full credit for each year of service in the public schools of Pennsylvania provided (a) He or she shall have rendered not less than twenty years of service in the public schools of Pennsylvania prior to retirement and (b) He or she shall have restored to the annuity savings fund his or her accumulated deductions as they were at the time of his or her separation. Each employe who separates from school service after the first day of July one thousand nine hundred and twenty-five and who returns to school service after a longer absence than five years shall have his or her annuity rights restored in accordance with the provisions of this paragraph provided he or she fulfills the conditions named in paragraphs (a) and (b) of this clause and in addition thereto (c) shall have left with the retirement board at least twenty per centum of his or her accumulated deductions at the time of his or her separation and (d) shall return to service prior to the age of fifty-nine years. In no case shall an employe who has separated from school service and who later returned to school service after five or more years of absence be eligible to retirement on account of disability until he or she shall have rendered at least three years of service subsequent to such return. In any case the restoration of the accumulated deductions provided herein may be made by the payment of a lump sum or any actuarial equivalent approved by the retirement board.. Subject to such rules and regulations as the retirement board may adopt the provisions of this act shall be applicable beginning July first one thousand nine hundred and twenty-five to all who are on the retired list of Pennsylvania public school employes at the time this bill becomes a law.*

Payment upon death

3. Should a contributor die before retirement, his or her accumulated deductions shall be paid to his or her estate, or to such persons as he or she

All portions stricken out by amendments are indicated by [ ]
All portions added by amendments are indicated by *italics*

shall have nominated by written designation, duly executed and filed with the retirement board.

(K) DISABILITY RETIREMENT

(5613) Retirement upon disability shall be made and discontinued as follows:—

Condition of retirement on account of disability

1. Upon the application of a contributor who is an employe, or of one acting in his or her behalf, or upon the application of the employer of a contributor, the retirement board shall retire said contributor on a disability allowance if he or she is under the age of sixty-two years, and on a superannuation allowance if he or she has attained or passed such age; provided the physician or physicians designated by said board, after a medical examination of said contributor made at the place of residence of said contributor, or at a place mutually agreed upon, shall certify to the retirement board that said contributor is physically or mentally incapacitated for the performance of duty, and that said contributor ought to be retired; and provided further, that said contributor has had ten or more school years of school service.

Periodic medical examination of disability annuitants.

2. Once each year the retirement board may require any disability annuitant, while still under the age of sixty-two years, to undergo medical examination by a physician or physicians, designated by the retirement board; said examination to be made at the place of residence of said beneficiary, or other place mutually agreed upon. Should such physician or physicians thereupon report and certify to the retirement board that such disability beneficiary is no longer physically or mentally incapacitated for the performance of duty, or that such disability beneficiary is able to engage in a gainful occupation, and should the retirement board concur in such report, then the amount of the State annuity shall be discontinued, or reduced to an amount that shall be not in excess of the amount by which the amount of the last year's salary of the beneficiary, as an employe, exceeds the present earning capacity of the contributor.

3. Should any disability annuitant, while under the age of sixty-two years, refuse to submit to at least one medical examination in any year by a physician or physicians designated by the retirement board, his or her State annuity shall be discontinued until the withdrawal of such refusal; and, should such refusal continue for one year, all his or her rights in and to the State annuity constituted by this act shall be forfeited.

Return to service of disability annuitants.

4. Upon application of any beneficiary under the age of sixty-two years, drawing a retirement allowance under the provisions of this act, said beneficiary may be restored to active service by the employer by whom he or she was employed at the time of his or her retirement. Upon the restoration of a beneficiary to active service, his or her retirement allowance shall cease.

(L) ALLOWANCE ON DISABILITY RETIREMENT

Retirement allowance of disability annuitants.

5. On retirement for disability, a contributor who is an employe shall receive a retirement allowance which shall consist of—

(a) An employe's annuity, which shall be the actuarial equivalent of his or her accumulated deductions; and

(b) A State annuity which, together with the employe's annuity shall be sufficient to produce a retirement allowance of one-ninetieth of his or her final salary multiplied by the number of his or her years of service; but, in any case not less than thirty per centum of said final salary shall exceed eight-ninths of the rate of retirement allowance to which the employe might have been entitled had retirement been deferred until age sixty-two, then the State annuity granted shall be such as to make the rate of the total retirement allowance equal to eight-ninths of the rate of allowance to which the employe might have been entitled had retirement been deferred until age sixty-two.

(M) SUPERANNUATION RETIREMENT

(5614) Retirement for superannuation shall be as follows:—

Conditions of retirement on account of superannuation.

1. Any contributor who is an employe sixty-two years of age or older may retire for superannuation by filing with the retirement board a written statement, duly attested, setting forth at what time, subsequent to the execution of said application, he or she desires to be retired. Said application shall retire said contributor at the time so specified, or, in the discretion of the retirement board, at the end of the school term in which the time so specified occurs.

Retirement compulsory at age 70.

2. Each and every contributor who has attained or shall attain the age of seventy years shall be retired by the retirement board, for superannuation, forthwith, or at the end of the school term in which said age of seventy years is attained.

(N) ALLOWANCE ON SUPERANNUATION RETIREMENT

Retirement allowance superannuation annuitants

3. On retirement for superannuation, a contributor who is an employe shall receive a retirement allowance which shall consist of—

Amendment of April, 1925

(a) [A teacher's] *an employe's* annuity, which shall be the actuarial equivalent of his or her accumulated deductions; and

Amendment of April, 1925.

(b) A State annuity of one one-hundred-sixtieth (1-160) of his or her final salary for each year of service; [prior to the age of sixty-two years;] and

All portions stricken out by amendments are indicated by [ ]
All portions added by amendments are indicated by *italics*

(c) In addition thereto, if a present employe, a further State annuity of one one-hundred-sixtieth (1-160) of his or her final salary for each year of prior service, as certified to said present employe in the certificate issued to him or her by the retirement board under the provisions of section [ten] *eleven* of this act; [but in no event shall the total State annuity exceed fifty per centum of his or her final salary.]

Amendment of April, 1925.

4. *Any person sixty-two years of age or older who was a class-room teacher in the public schools of Pennsylvania for at least twenty years and who separated from school service for any reason prior to the first day of July one thousand nine hundred and nineteen or any person who was a class-room teacher in the public schools of Pennsylvania for at least fifteen years and who separated from school service because of physical or mental disability prior to the first day of July one thousand nine hundred and nineteen and who still is unable to teach because of such disability shall receive a State annuity equal to one eightieth of his or her final salary for each year of school service. For this purpose there is hereby created a "Former Teachers' Fund" to which the General Assembly shall from time to time appropriate moneys sufficient to make payments under this sub-section provided that any teacher who is entitled to receive a State annuity hereunder and who is receiving a retirement allowance under the provisions of a local teachers' retirement system shall receive from the "Former Teacher Fund" only the difference between the annuity to which such teacher would otherwise be entitled under the provisions of this subsection and the annual amount received by such teacher from such local teachers' retirement system.*

(o) OPTIONS

(5615) At the time of his or her retirement any contributor may elect to receive his or her benefits in a retirement allowance, payable throughout life; or he or she may, on retirement, elect to receive the actuarial equivalent at that time of his employe's annuity, his or her State annuity, "or his retirement allowance in a lesser employe's annuity," or a lesser State annuity, or a lesser retirement allowance, payable throughout life; with the provisions that:—

Options of equivalent actuarial value that may be elected by the contributors.

Option 1.—If he or she die before he has received in payments the present value of his or her employe's annuity, his State annuity, or his or her retirement allowance as it was at the time of his retirement, the balance shall be paid to his or her legal representatives, or to such person, having an insurable interest in his or her life, as he or she shall nominate by written designation, duly acknowledged, and filed with the retirement board, at the time of his or her retirement.

Option 2.—Upon his or her death, his employe's annuity, his State annuity, or his or her retirement allowances shall be continued throughout the life of and paid to such person, having an insurable interest in his or her life, as he or she shall nominate by written designation, duly acknowledged, and filed with the retirement board, at the time of his or her retirement.

Option 3.—Upon his or her death, one-half of his or her employe's annuity, his or her State annuity, or his or her retirement allowance shall be continued throughout the life of and paid to such person, having an insurable interest in his or her life, as he or she shall nominate by written designation, duly acknowledged, and filed with the retirement board, at the time of his or her retirement.

Option 4.—Some other benefit or benefits shall be paid to either the contributor or such other person or persons as he or she shall nominate; provided such other benefit or benefits shall, together with such lesser employe's annuity, or lesser State annuity, or lesser retirement allowance, be certified by the actuary of the retirement board to be of equivalent actuarial value, and shall be approved by the retirement board.

(P) MONTHLY PAYMENTS

Retirement allowance paid in monthly installments.

(5616) An employe's annuity, a State annuity, or a retirement allowance, granted under the provisions of this act, shall be paid in equal monthly installments, and shall not be increased, decreased, revoked, or repealed except as otherwise provided in this act.

(Q) STATE SUPERVISION

Funds supervised by Insurance Department.

(5617) The various funds created by this act shall be subject to the supervision of the State Department of Insurance.

(R) EXEMPTIONS FROM EXECUTION

Retirement allowance exempt for taxation and unassignable.

(5618) The right of a person to an employe's annuity, a State annuity, or retirement allowance, to the return of contribution, any benefit or right accrued or accruing to any person under the provisions of this act, and the moneys in the various funds created under this act, are hereby exempt from any State or municipal tax, and exempt from levy and sale, garnishment, attachment, or any other process whatsoever, and shall be unassignable except as in this act specifically otherwise provided.

Penalty for attempt to defraud system.

Act July 18, 1917, P. L. 1043.

(5619) Any person who shall knowingly make any false statement, or shall falsify or permit to be falsified any record or records of this retirement system in any attempt to defraud such system as a result of such act, shall be guilty of a misdemeanor, and shall be punishable for such under the laws of the Commonwealth of Pennsylvania. Should any such change in records or any mistake in records result in any employe or beneficiary receiving from the retirement system more or less than he or she would have been

entitled to receive had the records been correct then, on the discovery of any such error, the retirement board shall correct such error, and, so far as practicable shall adjust the payments which may be made for and to such person in such a manner that the actuarial equivalent of the benefit to which he or she was correctly entitled shall be paid.

Action by Governor.

Resignation.

Period of service.

Half pay.

(5619) a. Hereafter, whenever the Governor is of the opinion that a State employe is incapacitated for performing his regular official duties, except State employes whose retirement has been or shall be otherwise provided for, he shall notify said employe of his opinion; and if the said employe shall resign within thirty days after such notice, and shall have served in office as such a State employe for twenty-five years or more, or who shall have reached the age of sixty-five years and shall have served in office as such State employe for twenty years, and shall hold himself in readiness to perform special duties, in such ways as he may be reasonably able to do, after his honorable retirement from office by resignation, he shall receive during the remainder of his life or during the continuance of such disability or incapacity, one-half of the salary which he would have received had he remained in active service. The term "State employe," as used in this act, shall *mean all officers and employes of the executive and legislative branches of the State Government, including officers and employes of the Department of Public Instruction who at the time of retirement are not contributors to the State Teachers' Retirement Fund and entitled to retirement in accordance therewith. The term shall also apply* to all *officers and* employes in penitentiaries, reformatories, and other institutions operated by the Commonwealth.

This paragraph (5619) a. is Section 1, Act of April 20, 1921, P. L. 197 amending Section 1, Act of June 7, 1919, P. L. 559.

All portions added by amendments are indicated by *italics*

APPENDIX II

THE AMENDMENTS* OF 1925 AND THEIR EFFECT UPON RETIREMENT ALLOWANCES

SENATE BILL 200

This bill contains an amendment to provide a retirement allowance for teachers who had retired prior to the establishment of the Retirement System. Provision is made for the establishment of a former teacher's fund, out of which annuities are to be paid in accordance with this bill. It, therefore adds no burden to any of the existing funds within the Retirement System. The amount of each retirement allowance is determined upon the basis of "final salary" and the years of service.

HOUSE BILL 1394

Provides an appropriation of $75,000 to this "former teacher's fund" created by Senate Bill 200. The new fund will be administered by the Retirement Board.

SENATE BILL 591

This Amendment provides that those who are out of service more than five years shall, under certain conditions, not forfeit their prior service provided they serve at least twenty years in the public schools of Pennsylvania. An illustration of a known case will perhaps best indicate the provisions of this bill. A teacher at the end of thirty-one years of service was compelled to stop teaching to take care of an invalid mother. The invalid mother lived six years, and then the teacher returned to service at the age of sixty-one. The fact that she had been out more than five years caused her under the old law, to forfeit her thirty-one years of service. The fact that she could not serve ten years prior to the age of seventy or the time when she must retire, made it impossible for her to receive an annuity as a new entrant. Although she had given forty years of service and contributed to the fund for several years, she could not get any retirement allowance. Senate Bill 591 corrects this evil in all cases where twenty years or more of service is rendered to the state. This bill also provides for a reduction in the rate upon which payment is made to the fund designed to meet the accrued liabilities. The actuaries in the 1924 evaluation of the funds, found that State Annuity Reserve Fund No. 2 was building up faster than was necessary. They, therefore, certified that the rate which the state and local districts paid to the fund—namely 2.8 per cent—could be safely reduced to 2 per cent.

* These amendments are printed in full in their proper places in the law in Appendix I.

SENATE BILL 363

This bill removes the $2,000 limitation, gives service credit for years of service rendered after age of sixty-two, and for service lost while participating in the World War, and removes the 50 per cent limitation upon the maximum state annuity.

This bill's provisions are made applicable to all those on the retired list to date from July 1, 1925.

Every school employe who has retired and who will retire is therefore benefited by this bill, provided his ten year average salary preceding retirement is greater than $2,000, or provided he serves beyond the age of sixty-two, or if he serves more than forty years, or if he participated in the World War activities.

In order to understand the Retirement Law or any of its amendments, it is important to have clearly in mind the definition of the terms used in the law. The first two pages of the law are given over to a full statement of definitions, 30 in number. In explaining the effects of these amendments, these terms must necessarily be used, and the definitions of these four terms are stated here in full.

"State Annuity" means the annual payments for life derived from contributions made by the Commonwealth of Pennsylvania, and in the following statement is referred to as S. A.

"Employe's Annuity" means the contributions for life derived from contributions made by a contributing employe, and is referred to hereafter as E. A.

"Retirement Allowance" means the "state annuity" plus the "employe's annuity," and is referred to hereafter as R. A.

" 'Final salary' means the average annual salary (not exceeding two thousand dollars) earnable by a contributor as an employe for the ten years of service immediately preceding retirement." (The words in brackets were stricken from this definition by the enactment of 363.)

In order that any one may figure out his or her own retirement allowance the following formula is herewith presented.

Let S equal "Final salary" as defined above.

Let B equal number of years of service* prior to July 1, 1919.

Let C equal number of years of service** prior to retirement.

Let E. A. equal annuity purchasable by your own accumulated deduction at time of retirement. The accumulated deductions from 1919 to date of retirement are supposed to purchase an annuity equal to $\frac{C-B}{160}$ of S, but they

* Service in the public schools of Pennsylvania is the only service counted in either the new or the old law.

** The overlapping of C and B is due to the fact that the State makes up the teacher's share of the cost prior to July 1, 1919.

will not do it unless payments are made on full salary back to July, 1919, and are kept up after age 62 to date of retirement. (See illustrations 1-b, 2-a, 2-c, 2-d, 2-f.)

Let "P" equal the annuity purchasable by the contributions to the old Philadelphia or other local fund. (This item will not exceed approximately $80 per year and probably can best be estimated at $25 per year.)

Let "R. A.—363" equal retirement allowance= $\frac{\text{B plus C}}{160}$ of S plus E. A. plus P.

UNDER THE OLD LAW

The retirement allowance would have been as follows—

Let "E" equal average salary for the last ten years not exceeding $2,000.
Let "B" equal number of years of service prior to July, 1919, or same as "B" above.
Let "F" equal number of years of service prior to age 62.
Let "H" equal same as "E. A." above (except on basis of salary, not exceeding $2,000).
Let "P" equal same as "P" above.

Let "R. A." equal retirement allowance= $\frac{\text{B plus F}}{160}$ of E plus H plus P.

Assume that you will retire at age 70, or any other age, 62 or over, and calculate what your retirement allowance (R. A.—363) would be under the new law, then calculate what it (R. A.) would be under the old law. (R. A. 363 minus R. A. is the additional retirement allowance provided by the passage of S. B. 363.)

ANSWERS TO QUESTIONS FREQUENTLY ASKED

1. Is it necessary to make up any back payments? NO.
2. May back payments be made up, if desired? YES
3. What are the advantages of making up back payments? You may increase E. A. but nothing else. (See illustration 1-b, 2-d, 2-f.)
4. Is it compulsory to contribute after 62? NO.
5. What are the advantages of making contribution after 62? You may increase E. A. but nothing else. (See illustration 2-a, 2-c, 2-d.)
6. Are the rates or amounts of contributions of employes who do not benefit by the passage of 363 in any way changed by it? Positively NO.
7. How and when may back contributions be made up? They may be made up in a lump sum or in any way actuarily equivalent—both the time and method have been announced by the Retirement Board.

8. Is it compulsory to contribute on the basis of salary in excess of $2,000? Yes, after July, 1925. The old rate will not be changed but the amount of the new deduction will bear the same ratio to the former deduction, as the present salary bears to $2,000.
9. Is it possible to obtain a retirement allowance in excess of 50 per cent of the final salary, "S?" Yes, in cases of more than 40 years of service, or where the annuitant has contributed to a former system such as the Philadelphia system. It is important to remember that the retirement allowance equals the sum of the state annuity and the employe's annuity, and that for the older teachers the state annuity is larger than the employe's annuity.
10. Is it possible to obtain a state annuity in excess of 50 per cent of S? Under certain conditions YES, but in general NO. Prior to this legislative session it was impossible, but S. B. No. 200 and S. B. No. 363 struck out this restriction because it was already practically obsolete and because its removal would help a large number on the retired list, whose present retirement allowances are very low because of this restriction coupled with the fact that their average salaries were determined very largely by the pre-war salaries. The only cases in which a state annuity in excess of 50 per cent of "S" is possible are the cases where B plus C is greater than 80. There are few such cases and in a few years they will be gone.

DISABILITY RETIREMENT ALLOWANCE

1. What is meant by disability retirement allowance? If an employe becomes physically or mentally disabled prior to age 62, he or she may be retired provided a certificate of disability from a competent physician is approved by the retirement board.

2. What is the amount of the disability allowance? 30 per cent of final salary. If the annuitant has served more than 27 years, then the disability retirement allowance will be as many ninetieths of final salary as there are years of service in the annuitant's record.

3. How does the S. B. 363 affect disability annuitants? It permits "final salary" to be determined upon the basis of full salary instead of salary not exceeding two thousand dollars.

ILLUSTRATIONS

Miss "M" was born on November 15, 1888. Began teaching in the public schools of Pennsylvania, September, 1910, and was a teacher consecutively until retirement age 62. Her final salary was $2,800. As her birthday falls within the school year we will assume that she continues teaching until July, 1951.

Apply these facts to the formula—

ILLUSTRATION NO. 1—RETIREMENT AT 62

(a) *Limiting Conditions*—Salary 1919-1925—always $2,000.
Calculations—S=$2,800; B=9; C=41

$$\text{E. A.}=\frac{C-B}{160} \text{ of } S=\frac{41-9}{2} \times 35=16 \times 35=560$$

$$\text{S. A.}=\frac{C \text{ plus } B}{160} \text{ of } S=\frac{41 \text{ plus } 9}{2} \times 35=25 \times 35=875$$

R. A.=S. A. plus E. A. plus P
=875 plus 560 plus 25=1460

(b) *Limiting Conditions*—Same as "a" above except that Miss M's salary from 1919 to 1925 averaged $2,200 per year instead of being $2,000.

Calculations—As she contributed during that period on the basis of only $2,000, she has the privilege of making up contributions on the difference, or $200. If her rate of contribution is 3.4 per cent her back payments would amount to $6.80 per year or a total of $68.00. If she makes up these back payments her annuity will be about $18.00 per year greater than in illustration No. 1 a.

(c) *Limiting Conditions*—Same as No. 1 b, except that she does not make the back payments.

Calculations—Her retirement allowance will be approximately the same as in No. 1 a, differing only in the value of E. A. as indicated in the definition of E. A.

ILLUSTRATION NO. 2—RETIREMENT AT 70

(a) *Limiting Conditions*—Salary below $2,000 up to 1925 and contributing after age 62.

Calculations—Same as No. 1 a, except C=49 instead of 41.

$$\text{E. A.}=\frac{C-B}{160} \text{ of } S=\frac{49-9}{2} \times 35=\frac{40}{2} \times 35=700$$

$$\text{S. A.}=\frac{C \text{ plus } B}{160} \text{ of } S=\frac{49 \text{ plus } 9}{2} \times 35=\frac{58}{2} \times 35=1015$$

R. A.=S. A. plus E. A. plus P
1015 plus 700 plus 25=1740

(b) *Limiting Conditions*—Salary below $2,000 up to 1925 and not contributing after age 62.

Calculations—Same as No. 2 a, except E. A. will be proportionately reduced, i. e., to be the same as the E. A. in illustration No. 1 a, or 560.

R. A.=S. A. plus E. A. plus P
1015 plus 560 plus 25=$1,600

(c) *Limiting Conditions*—Av. salary $2,200 from 1919-1925 and contributions kept up after age 62 but no back payments made for the extra $200 salary preceding 1925.

Calculations—The retirement allowance will work out to be approximately the same as in No. 2 a (see def. of E. A.) or $1,740.

(d) *Limiting Conditions*—Same as in No. 2 c except that payments are made up for the extra $200 prior to 1925.

Calculations—Same as in No. 2 c, except that E. A. will work out to be about $18 per year greater as similarly worked out in No. 1 b.

(e) *Limiting Conditions*—Same as No. 2 b, except that salary 1919-1925 was $2,200 and back payments for the extra $200 are *not* made.

Calculations—Same as No. 2 b.

(f) *Limiting Conditions*—Same as No. 2 e, except back payments for the extra $200 are made.

Calculations—Same as No. 2 e, except E. A. will be about $18 per year greater on account of making up back payments.

For comparison, one illustration is here given as to the way one of these cases would work out under the law as it was prior to passage of S. B. 363.

Limiting Conditions—Same as No. 1 a.

S=2000, B=9, C=41

$$\text{E. A.}=\frac{\text{C—B}}{160}\ \text{of}\ \text{S}=\frac{41—9}{2}\ \text{x}\ 25=\frac{32}{2}\ \text{x}\ 25=400$$

$$\text{S. A.}=\frac{\text{C plus B}}{160}\ \text{of}\ \text{S}=\frac{41\ \text{plus}\ 9}{2}\ \text{x}\ 25=\frac{50}{2}\ \text{x}\ 25=625$$

R. A.—S. A. plus E. A. plus P; 625 plus 400 plus 25=1050

ILLUSTRATION DISABILITY RETIREMENT

1. *Limiting Conditions*—Miss M becomes incapacitated in June, 1925.
   Calculations—30 per cent of "final salary" (see def.)
2. *Limiting Conditions*—Miss M becomes incapacitated in June, 1935.
   Calculations—30 per cent of "final salary" (see def.)
3. *Limiting Conditions*—Miss M becomes incapacitated in June, 1948.
   Calculations—$\frac{38}{90}$ per cent of "final salary" (see def.)

APPENDIX III

THE PENNSYLVANIA PLAN*

"The Pennsylvania system, passed in 1917, but not effective until 1919 is an example of the second group, because it represents the tendency to establish funds of state wide scope and because it has not been affected by some of the local problems that influenced the drafting of the New York City bill passed in 1917. The bill contains many of the features of the New York City pension scheme, including actuarial valuations, in addition to one already made in 1919, 1921, 1924, and every fifth year thereafter. Membership is optional for teachers in service at the time of the establishment of the system. Retirement will be permitted only on the basis of age or disability. The fund will be accumulated wholly on the reserve plan. The teachers contributions will be determined according to age, sex, mortality tables, and interest rates, but teachers will have the option of not paying more than five per cent of salaries each year, and the maximum salary from which deductions will be made will be $2,000. Teachers in service at the establishment of the fund will be expected to pay contributions only for that part of their service following the establishment, and the state will meet the cost of the accrued liabilities or the allowance dependent on prior service.

"In general it is intended that a teacher shall retire on request at the age of sixty-two and compulsory at the age of seventy on an allowance equal approximately to half salary, which will be made up of an annuity purchased with the accumulations of the teachers' contributions and a state annuity of one-hundred-sixtieth of final salary for each year of service. The method of calculating the state's share is open to objection that a teacher is not in a position to know what pension he may expect until he has retired, and to the danger that the system may be exposed to the not unknown abuse of sudden advances in the final salary which is the basis for the granting of pensions. On retirement teachers have the choice of a number of options: (a) to receive their allowances in monthly installments; or (b) to receive reduced payments with the provision that any sums remaining at death shall be paid to heirs or assigns; or (c) to receive reduced payments with payments to a designated beneficiary through life; or (d) to receive such other forms of actuarial equivalent as may be approved by the Retirement Board. Disability allowances will be granted after ten years of service and will be equal to at least thirty per cent of final salary, rising to a maximum of eight-ninths of the amount of the allowance which would have been due had the teacher been able to continue in service until the age of retirement. The

* From the Carnegie Foundation for the Advancement of Teaching. Bulletin Number 12, 1918.

disability provision is well protected and requires frequent physical examinations. If a teacher retired on the basis of disability should recover sufficiently to pursue some gainful occupation, the amount of the allowance may be reduced by the amount thus earned. Refunds of total contributions are provided for with interest compounded at four per cent. It is estimated that the present value of the benefits that should accrue to the 42,727 teachers now in service would amount to $60,587,657, of which $22,793,664, would be contributed by the teachers and $37,793,993 by the employers. To accumulate the employers' share would require the annual appropriation of a sum equal to 5.6 per cent of the payroll for teachers now in service, or about $1,500,000 annually, and to 2.75 per cent for future entrants, beginning the first of the year with about $25,000. The act does not apply to those school systems that already have a pension plan in force unless two-thirds of the teachers petition to join the state system. While the state will administer the fund through the Retirement Board of seven members,—the Superintendent of Public Instruction, the State Treasurer, one member appointed by the governor, three members elected by the teachers, and one member elected by the board,—and will guarantee the financial soundness of the fund, the act provides that the state shall be reimbursed by the employers of the teachers throughout the state to the extent of one-half of the amount paid by it to meet the future costs of the pensions. The intention of this provision is clear; it is an effort on the one hand to interest the local employer in the welfare of the teachers, and on the other hand to distribute the cost. But however laudable these purposes may be, the principle is open to several objections, of which the strongest is that since the act provides that the state may reimburse itself out of money due to local education authorities for school purposes, the school expenditures may be crippled to that extent. If the state desired to share the cost of the pensions this should not have been done at the expense of the schools.

"The burden of the cost may tend to discourage local authorities from raising salaries, or lead to the employment of only low-salaried teachers, and to this extent the migration of good teachers may be checked. A state pension system, state maintained in reality and not in name only, would result in putting into practice a principle that is beginning to be established, that teachers are servants of the state; it would tend to consolidate the profession that breaks down the rigid and artificial barriers between rural and city school teachers; and finally it would contribute towards a general raising of standards based on a community of professional interests and a recognition of community service."

APPENDIX IV

THE MASSACHUSETTS PLAN*

"The consideration of sound pension principles combined with the actual or threatened failure of a number of existing pension systems has borne fruit in recent legislation, which falls into two groups. The first teachers' pension system to make a departure from the prevailing tradition was that established in Massachusetts in 1913; since that time Erie, Pennsylvania, in 1916, and Connecticut in 1917, have followed the lead of Massachusetts and have adopted almost identical systems. Additional study of the subject led to the establishment of a somewhat different plan in New York City in 1917, followed in the same year with certain modifications in Pennsylvania. Both groups are open to certain criticisms, but both aim to embody sound principles. It is not to be expected that there shall be uniformity throughout the country; the only uniformity that is desirable is that all systems shall be as financially sound as actuarial calculation can make them, and shall secure the ends at which a pension system aims.

"The Massachusetts Teachers Retirement Act was passed in 1913 and came into force in 1914 as the result of a careful study inaugurated by state commissions in 1910 and 1913. It applies to all teachers in the Commonwealth with the exception of Boston. The system is administered by a teachers' retirement board of seven members, including the state insurance commissioner, the state bank commissioner, and the state commissioner of education, three members elected by members of the retirement association and a seventh member elected by the other six. Membership in the association was made optional for teachers in service and compulsory on all new entrants. The system is contributory, and the assessments are determined annually by the retirement board in accordance with actuarial advice, but are limited to sums equal to from three to seven per cent of salaries. Teachers may retire voluntarily at the age of sixty, or may be retired by the employing school committee at any time after that age if incapable of discharging their duties; retirement is compulsory at seventy. On reaching the age of retirement and after thirty years of service teachers become entitled to an allowance consisting of an annuity purchased with their accumulated contributions and a pension of an equal amount paid out of annual state appropriations. An option is permitted by which a retiring teacher may accept annuities of smaller amounts with the provision that these be continued after his death to his dependents, as he may direct. In case of teachers withdrawing from service before reaching the age of retirement, or in case of death, their estates are entitled to a return of all their contribu-

* From the Carnegie Foundation for the Advancement of Teaching. Bulletin Number 12, 1918.

tions with compound interest at three per cent. Disability allowances were not included in the original act but were added in 1917, and provide these benefits to teachers who become incapacitated for continued work in the schools after fifteen years of service. While this plan marks a considerable step in advance and opens up a new era in the history of teachers' pensions in this country, it is still open to the objection that it is impossible to predict what the probable cost of the share assumed by the state is likely to be in the future on the cash disbursement plan that has been adopted. The reserve plan would have defined the state's obligations clearly, and would have furnished to the whole system the security that now underlies the teachers' contributions. It should be mentioned, however, that the retirement board is watching the development of the system carefully, is accumulating valuable information, and has the constant advice of an actuary.

APPENDIX V

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INDEX

Page

Actuarial Reserve Plan 66
Acknowledgment x
Adequate Reserve, what constitutes 70
Age 23
  Age at Retirement 6, 27
  Compulsory Retirement Age 30
  Effect of Retirement Allowance upon the Time of Retirement.... 27
  Present Age of Retired Employes 24
  Regulations in Penna. 21
  Regulations in Other States 24
Amendments 89, 114
  Effect of 91, 116, 117
  See also Appendix II
Amount of Benefit 19
Annalist, reference to article in 31, 70
Appendices
  I. The Pennsylvania Law with the 1925 Amendments Annotated.. 123
  II. The Amendments of 1925 and their Effect upon Retirement Allowances 142
  III. The Pennsylvania Plan—Comments of the Carnegie Foundation 148
  IV. The Massachusetts Plan—Comments of the Carnegie Foundation 150
  V. Selected Bibliography 152
Average Salary. See Salary
Background 10
  Pension movement in the United States 11
  Retirement system in Penna. 12
  The Penna. Law of 1917 13
  Membership in the Penna. System 13
  Purpose of Retirement System 15
  Organization of Material 17
Basis of Superannuation Retirement in Penna. 19
Benefits 66
  Superannuation 75
  Disability 76
  Death, After Retirement 76
    Prior to Retirement 76
  Withdrawal 77
  Prior Service 77
    Wisconsin Illustrations 78
  Relation Between Amount and Cost of 66
Buck, George B., reference to writings of 13
Carnegie Foundation for Advancement of Teaching x
  References to Publications of 1, 5, 10, 11, 12, 15, 16, 19, 44, 45, 46, 51, 52, 53, 67, 94, 95, 109, 113, 119, 120
Cash Disbursement Plan 66
Certificates and Degrees Held 82
Children of Retired Employes 110

Page

Education of ... 110
Comparison of Nine States ... 5
In regard to Age ... 24
In regard to Service ... 34
In regard to Salary ... 64
In regard to Cost ... 74
In regard to Kind of Benefits ... 75
In regard to Retirement Allowance ... 93
Comparisons between Retired Employes and Teachers now in Active Service ... 83
Compound Interest, Effect of ... 71, 72
Annual Deposits in a Savings Bank
Compulsory Retirement Age ... 30
Conditions upon Which Benefits are Granted ... 21
Continuity of Service ... 36
In Penna. ... 46
Length of Break in ... 48
Contributions ... 131ff
Amount of ... 131ff
Return of ... 77, 135
Contingent Reserve Fund ... 68
See also Appendix I
Cornman, Oliver P. ... x
Costs ... 66ff
Superannuation Benefit ... 75
Death Benefit ... 76
Prior Service Benefit ... 77
Costs of Living, Present Arrangement for meeting ... 103
Credit Beyond Age 62 ... 48
Death after Retirement, Benefit in Event of ... 76
Death before Retirement, Benefit in Event of ... 76
Dependents:
Number of ... 111
Provision for ... 76, 119
Diagrams, List of ... xi
Direct Method of Relating Retirement Allowance to Salary ... 53
Disability Benefit ... 76
Education of Retired Employes ... 81
Employes' Annuity ... 21
Factors which
Enter into the determination of the Retirement Allowance in Penna 79
Tend to retain in the service those who have become unfit ... 79, 120
Are not so attractive to employes as those recommended by experts and now practised in other states ... 79, 120
Females ... 25, 9
See also Sex, Women
Final Salary ... 21
Funds:
Adequate Reserve ... 70
Contingent Reserve ... 68
Employes Annuity Savings Fund ... 68
State Annuity Reserve Fund No. 2 ... 70

Page
Half Pay Idea 20
Hamilton, W. I. 16
Illinois, Pension Laws Commission
Reference to 108
Illustrations, Wisconsin Law 78
Illustrations, Pennsylvania Law 145ff
Income other than Retirement Allowance 95, 101
From Personal Savings 95
From Inheritance 99
From Position taken since retirement 99
Indirect Method of Relating Retirement Allowance to Salary 53
Introduction 1
King, Leroy A.
Reference to Writings of 53, 81
Marital Condition 108
Massachusetts Pension Fund Commission 1, 27
Maximum and Minimum Limitations
On Age 24ff
On Benefits 86, 93
On Salary 61ff
On Service 34ff
Membership 13
Meriam, Lewis 1, 19, 23, 67, 86, 91
Method of Calculating Retirement Allowance 143ff
National Education Association
Reference to reports of 1, 11, 20, 44
Needs, amounts indicated as necessary to meet 104
New Entrant .....Appendix I, page 124
New York City Pension Commission 1, 16, 27
Occupation of retired employes 111
Options provided 87
Options selected 88
Organization of material 17
Other States, practice in. See Comparisons
Outside service 41ff
Pennsylvania Law of 1917 13
Pennsylvania Retirement Board
Reference to 1, 16
Pennsylvania State Education Association
Reference to 68, 114
Pennsylvania Superannuation Benefit 21
Pension vs. Retirement Allowance 12
Position held at time of Retirement 7, 50
Practice in Other States
See Comparisons
Present age of retired employes 24
Present Employes .....Appendix I, page 124
Procedure 2
Prosser, C. A. 16
Purpose of this study 1
Purpose of a Retirement System 15
Questionnaire 2

Page

Regulations and Basis of Superannuation Retirement in Pennsylvania and the corresponding practice in other states 19
Relation of
Average salary the last ten years of service to retirement allowance 61
Average salary the last ten years to income from personal savings 99
Average salary the last ten years to total income other than retirement allowance 101
Retirement allowance to needs 105
Average salary last ten years to needs 106
Retirement allowance below subsistence level 21, 86, 88
Retirement allowance, method of calculating 143ff
Retirement System in Pennsylvania 12
Membership in 13
Salary 52
Amount of benefit in relation to 54
Amount of, in the first year of service of the employes now retired 55
Amount of, in the last year of service of the employes now retired 56, 57
Average amount of, for the last five years of service preceding retirement 58
Average amount of, for the last ten years of service preceding retirement 21, 60
Opposition to the direct use of, in determining retirement allowance 53
Savings Bank Comparison 71, 72
Savings, personal, were small 101
Explanation for 101
Scope 1
Service
In the Public Schools of Pennsylvania 39
In other educational institutions in Pennsylvania not part of public school system 41
In Public Schools outside of Pennsylvania 42
In other educational institutions outside of Pennsylvania (not part of public school system) 43
Sex, in relation to cost of benefits 26, 27
Snedden, David 16
Sources
Original and secondary 1
State annuity 21
States, see Comparisons
List of, having retirement systems 23
Studensky, Paul ..... x, 1, 11, 12, 20, 44, 61, 67
Summaries
Age 32
Amendments 119
Costs and Benefits 78
Dependents and present occupation 113
Education and Training 84
Income other than retirement allowance 106
Retirement allowance 93
Salary 65
Service 51
Part I 79

Summaries Cont.

Page

Part II 119
Complete 120
Superannuation Benefit 21
Tables, list of v
Training of retired employes 81
U. S. Bureau of Education 1, 81
Valuations, actuarial 66, 67
Validity of Data 6
Wisconsin, Supreme Court Decisions 10
Wisconsin, Illustrations 78
Withdrawal, benefit in case of 135, 77
Women (see also Sex, Females) 26, 27
Years of service accredited in determining state annuity 21, 22, Appendices I and II